

Challenges Teaching in Kazakh as L2

Challenges Teaching in Kazakh as L2

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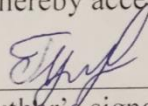
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The NUGSE Research Committee reviewed the project entitled "Challenges teaching in Kazakh as L2" and decided:

☐ To grant approval for this study subject to minor changes, to be discussed with supervisor

Approval subject to minor changes: The study is approved subject to minor changes.

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While the student has stated to use pseudonyms to safeguard the identity of the site and participants, the possibility of other teachers at the school deducing the participants' identity cannot be ruled out. For example, other teachers in the school may see the researcher working with the participant teacher and going to his/her class for observation and can identify it. The student needs to state that she will conduct the interviews with the participants in such venues which ensure privacy and not accessed by everyone.

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NUGSE Research Committee

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Abstract

Challenges Teaching in Kazakh as L2

One of the most recent strategic developments of the country is language policy based on the cultural project “Trinity of Languages”. In education it is implemented as trilingual policy.

The main focus of this qualitative master thesis is to explore geography teachers’ perceptions about challenges in teaching geography in Kazakh as L2 at Russian-medium groups (RMGs).

This study can be a valuable contribution to language-in-education policy research and practices in Kazakhstani trilingual context at micro and macro levels of trilingual policy and planning.

The research purpose is to explore teachers’ perceptions about facing challenges in teaching geography in Kazakh as L2 to RMGs, what practices they use to address the challenges in their classroom practices, and how teachers’ perceive the role of pupils’ environment in learning content in Kazakh as L2. Interviews, classroom observations and syllabi analyses were used to explore perceptions about L2 challenges of purposefully selected four teachers (two teachers in each selected NIS) from two parts of Kazakhstan (western and northern). The empirical findings showed unevenly developed Kazakh L2 proficiency, low academic vocabulary proficiency and learners’ environment perceived as major challenges. Based on the language-in education framework within community policy perspective NIS is significant L2 and L3 even L1 enhancement platform whereas home language environment seemed as challenge and benefits under certain circumstances. The least important issue is pronunciation in L2 in CLIL lessons. There is one challenge related to syllabi, as it was revealed both Kazakh and Russian medium classes use one syllabus with similar aims, outcomes, and materials. Teachers did not consider it as a problem. Locations of schools as a challenge were

not proved. This study helps local policy experts understand teaching challenges in Kazakh as L2 based on the study framework.

Аннотация

Трудности Преподавания на Казахском Языке Как на Втором Языке

Одним из последних стратегических направлений развития страны является языковая политика, основанная на культурном проекте «Триединство языков». В образовании этот проект реализуется как политика трёхязычия. Главная цель этой магистерской диссертации, основанной на качественном анализе, является изучение восприятия трудностей в преподавании географии на казахском языке, как на втором языке (Я2), в русскоязычном классе. Это исследование может стать ценным вкладом в политику исследования и практику казахстанского языкового образования в контексте трёхязычия. В работе анализируется восприятие учителями проблем, возникающих при обучении географии на казахском языке, как на втором языке, в русскоязычном классе; вместе с тем какие методы используют учителя - предметники для решения проблем в своей практике. Также анализируется как учителя воспринимают ученическую среду и её роль в изучении предметов на казахском языке как Я2. В ходе исследования, для сбора информации, были проведены полужформальные индивидуальные интервью, наблюдение уроков; был проанализирован утвержденный предметный план для изучения восприятия проблем Я2. Мною были целенаправленно выбраны четыре учителя НИШ двух регионов Казахстана (западной и северной части). Эмпирические данные выявили неравномерность развитий второго языка, низкий академический уровень владения лексикой, а ученическая среда русскоязычных классов воспринимается как серьезная проблема. Политика образования, как основа этого исследования, включает несколько политик сообщества НИШ и является основной средой или сообществом, где успешно развиваются Я2, Я3, а также Я1. Однако, другая (домашняя) языковая среда может быть рассмотрена и как проблема и как выгода в

развитии Я2 в зависимости от определенных обстоятельств. Наименее важной проблемой является произношение в Я2 на уроках CLIL. В ходе сбора информации для данной работы было выявлено, что в параллелях, и с обучением на казахском языке и с обучением на русском языке, используется одна программа с одинаковыми целями, ожидаемыми результатами и материалами, что учителями географии не рассматривается как проблема. Географическое положение НИШ как проблема не была подтверждена. Предложенное исследование поможет местным экспертам образования понять трудности преподавания на казахском языке как на втором языке.

Аңдатпа

Қазақ Тілі Екінші Тіл ретінде Оқыту Қиындықтары

Елдің соңғы стратегиялық бағыттарының бірі мәдени жоба «Тілдердің үштұғырлылығы» негізіндегі тіл саясаты. Білім беру саласында бұл жоба үштілділік саясат ретінде жүзеге асырылуда. Осы магистрлік диссертацияның басты мақсаты сапалық талдау арқылы орыс сыныптарында қазақ тілінде екінші тіл (Т2) ретінде география пәнін оқыту қиындықтарын зерттеу. Бұл зерттеу Қазақстанның үштілділік контексіндегі тілдік білім беру саясаты мен практикасы зерттеулеріне құнды үлес қосуы мүмкін. Осы зерттеуде география оқытушыларының орыс сыныптарында қазақ тілінде география пәнін оқыту қиындықтары туралы, олардың сабақ беру тәжірбиесінде қандай әдістерді пайдалана отырып сол қиындықтардан шығу туралы және қаншалықты оқушылардың ортасы тілден басқа пәндерді қазақ тілінде Т2 ретінде үйренудегі ролі туралы түсініктерін зерттейді. Мұғалімдердің қазақ тілі екінші тіл ретінде оқыту қиындықтары туралы түсініктері сұхбаттасу, сабақты бақылау мен бекітілген пән программасын талдау арқылы жинақталды. Қазақстанның екі өңірінде (батыс және солтүстік) орналасқан Назарбаев Зияткерлік Мектептерінен (НЗМ) төрт пән мұғалімін мақсатты түрде іріктеу тәсілін пайдаланып зерттеуге қатысуға шақырылды.

Эмпирикалық деректер бойынша орыс тілді сынып оқушылары арасында екінші тілдің біркелкі болмауы, академиялық лексиканың төмен болуы және оқушылардың ортасы негізгі қиындықтар ретінде көрсетілді. Осы зерттеудің негізі болған *тілдік білім беру саясаты* арқылы эмпирикалық деректер талданады. Аталған зерттеу негізіндегі қауымдастық саясаты тұрғысынан НЗМ үш тілді дамытатын платформа ретінде қарастырылады. Алайда оқушылардың үйдегі тілдік ортасы белгілі бір жағдайларда

ғана екінші тілдің дамуына кедергі немесе мүмкіндік беретін орта ретінде айқындалды.

Осы зерттеу барысында CLIL тәсілі арқылы үйренуде екінші тілде кездесетін айтылу қиындықтары маңызды емес екені анықталды. Зерттеудегі эмпирикалық деректер негізінде қазақ және орыс сыныптарында пайдаланылатын пәндік бағдарлама мазмұны, сабақ мақсаттары мен күтілетін нәтижелер бірдей екені анықталды. Бұл жағдайды пән мұғалімдері оқыту қиындықтары ретінде қарастырмады. Мектептердің географиялық орналасу мекені тілдік емес пәндерді үйренуде қиындық ретінде расталған жоқ. Бұл зерттеу жергілікті білім сарапшыларына қазақ тілі екінші тіл ретінде оқыту қиындықтарын түсінуге көмектеседі

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Introduction

Background to The Study

At the end of the twentieth century almost all newly independent post-Soviet states were involved in language planning as a means to unite and strengthen their nation (Landau & Kellner-Heinkele, 2001; Fierman, 1991, Fierman, 2009; Smagulova, 2006; Smagulova, 2016). Kazakh as a state language was adopted on the eve of independence in 1989-1990 (Pavlenko, 2008; Schlyter, 2013, Smagulova, 2008). Kazakhstan remained as one of the Russified countries among the Central Asian republics even after the independence (Rees & Williams, 2017; Schlyter, 2013). Exceptional diversity in some parts of Kazakhstan territory made it difficult to raise the status of Kazakh (Schlyter, 2013; Suleimenova, Shaimerdenova & Akanova, 2008; Smagulova, 2016). Thus, in regaining the status of Kazakh, geographical locations, urban and rural environments considered as one of the issues in language policy planning (Schlyter, 2013; Smagulova, 2016).

The 1995 Kazakh Constitution states that “the Kazakh language is the sole state language in Kazakhstan”, a policy was aptly referred as a ‘kazakhization’ (Matuszkiewicz, 2010). But right after that, Kazakhstan adopted a multilingual / bilingual language policy by assigning the status of Russian as an official language of interethnic communication which can be used on par with the state language in Kazakhstan (Concept as cited in Yakavets, 2014, p. 15). Such misbalance of the state language use forced government agencies (less than 40% of the population was Russians) to release a new Law on Languages in 1997 (Yakavets, 2014, p.15; Schlyter, 2013). After the adoption of the Law on Languages a series of programs and cultural project “Trinity of Languages” was suggested to strengthen the status of the state language in all social domains of the state (Office of the President, 2013; State Programme for Development and Functioning of Languages for 2001-2010, 2001; State Programme for

Development and Functioning of Languages for 2010-2020, 2011); In the following years, the President of the country in his annual addresses to the nation set new goals for increasing economic competitiveness of the country which were geared toward the promotion and elevation of Kazakh (Nazarbayev, 2012). It is aimed that Kazakh will take a leading role in all spheres of society with increasing share of Kazakh users to 95% by 2020, and proficiency in Russian will reach to 90%. In addition, English speaking citizens are expected to constitute at least 20% (Government of Kazakhstan as cited in Mehisto et. al., 2014).

In Kazakhstani education that cultural project is being realized as trilingual policy (Goodman & Karabassova, under review; Iyldyz, 2017). From sociolinguistic perspective current situation toward the state language is improving due to educational reform (Smagulova, 2016). The role of education reform as Smagulova (2016) stated becomes an “instrumental in re-acquisition of Kazakh by the younger generation” (p. 102). Her sociolinguistic research revealed positive attitudes among young urban and rural generation to the state language use.

Statement of The Problem

Today, implementation of trilingual education in secondary school system is one of the most urgent tasks in Kazakhstan. Pre requisites of the policy, schools are now expected to provide education in three languages, Kazakh, Russian and English by 2019 (Information Analytic Center, 2017). In this regard, trilingual policy has been implemented in Nazarbayev Intellectual Schools (NIS) in Kazakhstani context since 2008 (Mehisto, 2015). Today there are 20 NIS schools which are working in all regions of Kazakhstan. Based on these goals, NIS support and implement trilingual education model where all Kazakh, Russian and English are taught as subjects and are used as language of instruction, i.e. (Nazarbayev Intellectual Schools, 2017).

Key trilingual implementation tools within NIS are team-teaching practices for both language and non-language classrooms, CLIL approach for teaching content subjects in L2 and in L3, and language immersion policy for language subjects (AEO NIS, 2013). Without considering NIS learners' first language (L1) 10% of subjects are taught in the second language (L2) either in Kazakh or in Russian from the 7th -till 9th grade (Goodman & Karabassova, under review; Information Analytic Center, 2017; Mehisto et al., 2014; Mehisto, 2015; Shamshidinova et al., 2014) except two NIS where learners attend from kindergarten age (Kokshetau & Taldykorgan) (Information Analytic Center, 2017). Moreover, as was mentioned above NIS located in different parts of Kazakhstan therefore, from historical sociolinguistic perspective locations can influence on learning subjects' in Kazakh as L2 or in Russian as L2.

This research refers to secondary school content teachers' perceptions of challenges in teaching subject in Kazakh as L2 within trilingual policy implementation. The study literature review found out a few past studies which focused on trilingual policy and planning issues in classroom teaching and learning (Khamidulina, 2016; Iyldiz, 2017; Mehisto et al., 2014; Shegenova, 2016) and more detailed analyses are in Chapter 2. In this vein, Information Analytic Center (2017) reported necessity of all teachers who are involved in trilingual implementing process to attain purposefully three languages; to learn, improve and use regularly teaching methods for conducting academic subjects in L2 or in L3 embracing Content Language Integrated Learning (CLIL) and for education coordinators Information Analytic Center (2017) recommended to compile separate subject plans and course plans/syllabi for learners' who study one subject in the same language, for example, "separate programs for History of Kazakhstan for groups with Kazakh and Russian languages of instruction" (p. 172) . All past studies revealed insufficient Kazakh language level to study

content subjects in L2 or in L3. Hence, such recommendations state that there are many challenges in trilingual education policy and planning processes which should be reflected and researched in a regular base to understand and to help both for teachers and learners in promoting their competences in three languages.

Significance of The Study

While there are many studies on teaching content subjects in L2 in secondary school in the world practice, there is a little attention have paid on interaction in teaching subjects in L2 using CLIL approach (Mehisto, Marsh & Frigols as cited in Mayo & Basterrechea, 2017). Nikula, Dalton-Puffer and Llinares (2013) echoed the same sentiment that there is not much research on how language and content “issues are learnt and used in an integrated way” in constructing knowledge in L2 (p. 86). In Kazakhstani context there is a very little research about variability of learners’ environment and its role in teaching content subjects in Kazakh as L2 within trilingual policy implementation except Information Analytic Center report recommendations (2017). So, this study explores Geography teachers’ perceptions of challenges in teaching in Kazakh as L2 in CLIL condition at RMGs contributing to the above mentioned past studies within NIS trilingual classroom. In addition, this study can explain influence of each related language-in education policy domains for better understanding teaching issue of non-language subjects in Kazakh as L2 settings.

Purpose of The Study

The purpose of this study is to examine Geography teachers’ challenges in teaching in Kazakh as L2 in RMGs in Grade 8 and Grade 9 in two NIS. They are located in different parts of Kazakhstan (northern and western) and based on the third research question it is significant to identify learners’ environment role in learning subjects in Kazakh as L2 from teachers’

perspective. This study can be significant for local experts and policy makers and teachers who are involved in trilingual policy and planning.

Research Questions

To understand teaching challenges in Kazakh as L2 this study seeks to address the following research questions:

1 .What kind of challenges do geography teachers face teaching in Kazakh to Russian medium groups (RMGs)?

Sub-questions: i. What are teachers' perceptions of students' Kazakh as L2 proficiency level?

ii. What are teachers' perceptions of teaching materials?

2. What practices do teachers use to address these challenges?

3. How do they perceive the role of students' environment in learning subjects in Kazakh as L2?

These questions identify specific L2 challenges, availability degree of teaching materials and their relevance for learners' proficiency level, preparation time and spending energy for creating materials. Moreover, this study can indicate what practices Geography teachers implement to deal with facing challenges in teaching in Kazakh as L2. Finally, whether geographical locations of NIS reveal various perceptions of learners' environment and its role in learning subjects in Kazakh as L2

The aim of this study is not to generalize the findings to all secondary schools or to all NIS; it is rather focused on a particular subject teachers from two NIS (more information about NIS is provided in Chapter 2). The samples of this study are four Geography teachers (two from each NIS) who teach geography in Russian-medium groups. The compiled study questions are explored through semi-structured interviews, classroom observations and syllabi

analyses (more detailed information about the study methodology and instruments are in Chapter 3).

Outline of The Study

In the introduction chapter, I explained the reasons of my research choice, presenting background to this study explaining problems, significance, purpose and questions of the study. Chapter 2 overviewed language policy and language planning definitions underlying the official language functions based on international and national contexts examining historical and current sociolinguistic situations. Teachers' role in improving new education reform was reviewed from language-in-education perspective. NIS as trilingual policy planning platform has been reviewed. In the scope of this study framework language role in CLIL and CLIL as content subject teaching method had been analyzed. At the end of Chapter 2 the conceptual framework of this study is explained and analyzed. Its focus was five language in-education policies and embedded two more frameworks which help to understand perceptions of teaching challenges in Kazakh as L2. Chapter 3 presents outline of methodology of qualitative research design and the rationale of sample and site selection decisions and chosen instruments referring to the research questions. The last section describes ethical considerations, researcher's positionality, trustworthiness issues and limits which can be significant for this study. Chapter 4 compiles the research findings of Geography teachers' perceptions of teaching challenges in Kazakh as L2 in (Grades 8 and 9) Russian-medium groups. Chapter 5 synthesizes the previous chapter findings. Chapter 6 offers recommendations and implications for teaching practice and for local policy experts, and for future research.

Chapter2: Literature Review

Introduction

The purpose of this qualitative study is to explore teachers' perceptions of challenges in teaching geography in Kazakh as L2 in Russian-medium groups (RMGs) based on the following research questions: 1. What kind of challenges do geography teachers face teaching in Kazakh as L2 in Russian medium groups (RMGs)?

Sub-questions: i. what are teachers' perceptions of students' Kazakh as L2 proficiency level?

ii. What are teachers' perceptions of teaching materials?

2. What practices do teachers use to address these challenges?

3. How do they perceive the role of students' environment in learning subjects in Kazakh as L2?

In keeping the focus of the study primarily on examining challenges in teaching geography in Kazakh as L2 as part of trilingual policy process, it is important to highlight that literature review will provide components of macro planning where policy decisions within micro level practices are realized. In light of the study purpose, seven major interconnected areas of literature were critically reviewed: (1) overview of language policy and planning: a definition, (2) official language functions and weakness of language policy and planning examples, (3) language-in-education policy and planning (LiEPP), (4) classroom practitioners as language policy-makers and/or agents, (5) Nazarbayev Intellectual Schools: a new language-in-education policy and planning platform, (6) CLIL approach in teaching content subjects in L2, (7) the roles of language in CLIL. In the final part of this chapter I present my conceptual framework.

Overview of language policy and planning: a definition

Planning and implementation concepts of decision processes at different levels and domains around language have been termed in different ways and used interchangeably- *language planning* (Cooper, 1989; Ferguson, 2006; Haugen as cited in Johnson, 2013; Kaplan & Baldauf, 1997); *language policy* (Ricento, 1996; Shohamy, 2006; Spolsky, 2004) *language policy and planning* (LPP) (Fettes, 1997; Hornberger, 2006; Hornberger & Ricento, 1996;) and *language planning and language policy* (Liddicoat, 2013).

Language policy is set of either deliberate bottom up, overt, explicit, de jure choices or top down, covert, implicit, de facto choices made up to establish “relationship between language and social life” (Djite, 1994; p. 64 see also Johnson, 2013). Language planning or language implementation usually emerges as result of language policy (Johnson, 2013; see also Cooper, 1989; Djite, 1994; Ferguson, 2006).

Education area is tended to be one of the significant instruments for “the attainment of wider status planning goals” (Ferguson, 2006, p. 34; see also Cooper, 1989) which disseminates national standard language increasing quantity of language users. Language policy and language planning for learning have been separated and called by Cooper (1989) “Acquisition planning”, or “Language-in-education policy and planning” (Kaplan & Baldauf, 1997). According to Fishman (2006) education focused on young people and it can be operated as a “very useful and highly irreversible language-shift mechanism” (p.320). In other words, the role of education has been acknowledged in the language planning process. However, education / school is not the only realm where language learning policies occurred. Some studies established that (Hornberger; 2006; see also Ricento, 1996) literature, religion, mass media and work as additional areas where implementation of literacy development, maintenance programs and acquisition of additional languages can be introduced (Baldauf, 2006; Ferguson, 2006; Johnson, 2013; Kaplan & Baldauf, 1997; Liddicoat, 2013).

Hence, language policy is a kind of intention to achieve national, social cohesion; language planning accomplishing the planned tasks to deal with the revealed language problems. This study avoids detailed discussions of corpus planning, status planning and prestige planning though they are parts of the whole language policy and planning theory and practice models.

Official Language Functions and Weakness of Language Policy and Planning Examples

Language policy and planning is (LPP) a powerful mechanism which can build a cohesive community, facilitating to raise the status of the official language. The official language status based on social functions can have three types as Stewart (as cited in Cooper, 1989, p.99) defined: official, working and symbolic. In some countries the official language status cannot be evenly spread among the community as a result, the official language cannot function equally in certain domains of the society (Cooper, 1989). It depends on many LPP factors and time but some factors can be beyond LPP, for instance, the case Quechua in Peru would explicitly demonstrate language policy and planning limitation or weakness (Ferguson, 2006). Quechua in 1976 was accepted as co-official language with Spanish in Peru however, dominance of Spanish speakers impeded meaningful implementation of Quechua (Ferguson, 2006, p.12). In other words, Quechua could not actively be functioned as official or working language that time.

In other case, for successful implementation of LPP goals needed time, Spolsky (2004) reported that Canadian city of Montreal where early 1960s it was noticed imbalance use of English and French. Nevertheless, forty years later French language could function as working language extending its use in some public domains. Behind that achievements there were many explicit policy and planning interventions at governmental level which were enforced

by law (p.5).

The third case can be Kazakh as the official language of Kazakhstan which is not actively used in some parts of Kazakhstan after dissolution of the Soviet era. Though, many reform initiatives and legal documents are being issued to strengthen the state language status through all dimensions of society (Fimyar, Yakavets & Bridges, 2014; Yakavets & Dzhadrina, 2014; Yakavets, 2014). In early periods of independence majority of urban population spoke Russian and most Russian and Slavic settlers lived in northern, central and eastern parts of Kazakhstan (Schlyter, 2013, p.876 see also Pavlenko, 2008). One of the historical reasons was Agrarian Reform when Slavic and Russian population had to move to certain territories of Kazakhstan (Mehisto, et. al., 2014, p. 153). This administrative map of Kazakhstan (KZ) can be helpful to visualize in what parts of Kazakhstan have been more Russified than others. It was retrieved from Wikipedia and was adapted (January, 2017).



Figure 1. Administrative map of Kazakhstan (Retrieved from Wikipedia and adapted)

In other parts of Kazakhstan there was bilingual Kazakh speaking population. But rural ones interacted mainly in Kazakh. This situation was named as “a segregated language community” (Schlyter, 2013, p. 876). That time Russians clearly outweighed in the number than the titular language posers (Landau and Kellner–Heinkele, 2001) but by 2009 Kazakhs became majority constituting 63.1% of the whole Kazakhstan population (Mehisto, 2015).

Moreover, there are additional empirical studies related to Kazakhstan’s language policy and planning issues which focused on the aspects of nation-building, state building and national identity (Dave, 2007; Fierman, 1998; Kellner-Henkele & Landau, 2001); language use from sociolinguistic perspective (Smagulova, 2008; 2016; Suleimenova, 2009); historical records and examination of language policy development (Kuzhabekova, 2009); ethnic power ties (Matuszkeiwicz, 2010; Smagulova, 2006). From sociolinguistic perspective Smagulova (2016) based on mixed-methods study revealed that Kazakh is gaining social prestige among urban and rural young generation and becoming “a must-know language” (p.102) and it is perceived as language for further social promotion and mobility in Kazakhstani content.

Overall, any modifications in language and in language policy can have “correlated effect and causes” (Spolsky, 2004, p. 6) to other contexts of society. Still locations may influence in learning subjects in Kazakh as L2 though, sociolinguistic study data positively interpret urban and rural learners’ attitude to acquire Kazakh as the official language. The following paragraph will selectively describe and analyze language-in-education policies (Kaplan & Baldauf, 1997) which are pertinent to this study.

Language-in-Education Policy and Planning

In education sphere Kaplan and Baldauf (1997) defined six major dimensions within language-in-education policies: “Curriculum Policy, Personnel Policy, Materials and Policy, Community Policy, and Evaluation Policy” (p. 124; see also Baldauf, 2006). Liddicoat (2013) calls them “the mechanics of providing languages in schooling” (p.7) within the education system which support language acquisition: Johnson (2013) echoed the same sentiment calling them as “key implementation procedures for language policy and planning” (p.53). In the following paragraphs of the study the above mentioned language-in-education implementation areas will be examined in detail except evaluation policy area, because this study does not focus on holistic evaluation of NIS trilingual policy implementation processes. As Kaplan and Baldauf (1997) defined, Evaluation Policy examines curriculum as “teacher and learner success/ interest, cost effectiveness, societal change and basic policy” (p.124).

Curriculum policy is centralized and mandated by “educationists, educational linguists, or curriculum experts as policy makers” (Baldauf, Li & Zhao, 2010, p. 239); what subjects will be taught, how many hours with clear objectives, should all achieve the same proficiency level and specific assessment tools (Liddicoat, 2013). According to Kaplan and Baldauf (1997) the first issue is to identify how much time needed for language instruction and second issue is when to begin language instructions (p.128). Language instruction can be varied from one education system to another in the world. For instance, in late immersion programs learners start learning content subjects in the second/ foreign language beginning secondary school (Willis, 2010 see also Johnson & Swain, 1994). Curriculum policy sets realistic class size for learners and overall instruction hours (Kaplan & Baldauf, 1997) as they admitted if communication enhances language learning ability then reduced class size can be valued. Sometimes, some subjects are required to be taught in that target language, though “it requires

specialized teachers and teaching materials” (p. 129). In addition, if the organization or policy makers are interested in getting better results they are to think about programs that are used out of class (Kaplan & Baldauf, 1997, p. 129), for example, summer schools at NIS (Board of AEO NIS, 2015). And they added that if such additional summer vacation schools will be introduced at “high/ junior level (Grades 7, 8, and 9)” learners can become more proficient in the target language communication. In high school learners (10/11 grade) just improve their reading and writing skills (p.130). The next paragraph reviews personnel policy area.

Personnel policy embraces recruitment of teaching staff; identification of sort of education necessary to prepare teachers for new education policy and how to meet standards through professional learning (Kaplan & Baldauf, 1997; see also Liddicoat, 2004; 2013). According to Baldauf, Li and Zhao (2010) personnel policy can be different from one country to another (p. 238) and from one educational organization to another. The main issue within this policy is to organize pre-service trainings for meeting with policy and planning needs which can be recommended further in-service training courses or programs (Baldauf, Li & Zhao, 2010 see also Kaplan & Baldauf, 1997).

Materials Policy considers what methodology and materials can be prescribed for language study (Liddicoat, 2013). For instance, CLIL is one of the recommended methodological approaches which promote trilingual implementation process where content subjects are taught in L2 or in L3 (AEO NIS, 2013). Liddicoat (2004) argued that methods explicitly discussed “when there is a perception that existing teaching approaches are problematic” (p.154); for example, the learners’ low results of language tests were perceived as a result of implemented grammar-oriented methodology in China context and it was replaced by communicative language teaching approach (Hu as cited in Liddicoat, 2004; Liao as cited in Liddicoat, 2004). However, teaching practice should be treated as multifaceted

problem with other impactful factors (Liddicoat, 2004). Liddicoat argues that from language teaching perspective in policy level there is still lack of attention to innovations in method in this turn Markee (as cited in Liddicoat, 2004) characterized teacher as part of this change in language teaching as follows:

level of language proficiency and level of professional learning and cultural dimensions such as expected learning and teaching styles, learners and teacher roles, expected outcomes of language learning and patterns of classroom interaction may all influence the practical impact of method change at the policy level. (p. 155)

In other words, within language-in-education policy new approaches cannot be accepted or may fail if policy ignore or give little attention to the context where teaching is happening. Thus, language-in-education planning provides appropriate methods which are consonant with authentic teaching materials and relevant with teachers' expectations.

Community policy considers various approaches toward "parental attitudes, funding sources, recruiting teachers/ students" (Kaplan & Baldauf, 1997, p. 124). NIS creates summer school courses to enhance learners' L2 and L3 and L1 competencies (Board of AEO NIS, 2015). Overall, the main mission of this policy area is to create approaches which can convince learners, and adults that "language education" (Kaplan & Baldauf, 1997, p.135) and learning are as valuable as other activities in children's lives.

Overall, initially the reviewed Kaplan and Baldauf's framework is very important to understand formal classroom teaching and learning issues from language- in-education policy and planning perspectives.

Classroom Practitioners as Language Policy-Makers and/or Agents

This study examines teachers' perceptions of challenges in teaching geography in Kazakh as L2 at secondary classroom from language-in-education policy and planning perspective. Baldauf (as cited in Baldauf, 2006; see also Nguyen & Bui, 2015) is one of the first researchers who defined the valuable contribution of teachers in language implementation practice and they are regarded as important variables in the epicenter of language planning processes (Throop, 2007). The centrality of teachers in language planning development at classroom level is proposed by Ricento and Hornberger (1996; see also Skilton-Sylvester, 2003). Before them, Cooper, (1989) highlights the importance of formal teaching for promotion of language policy at society level. However, from historical perspective Johnson (2013) claims that other studies did not explicitly mention educators' role or their role can be "undertheorized" (Johnson, 2013; see also Baldauf, 2006; Menken & Garcia, 2010; Nguyen & Bui, 2015; Priestley, Edwards, Priestly & Miller, 2012). According to Nguyen and Bui (2015) teachers are "critical actors" in implementing language policy (p.89) because educational reform and changes as Fullan (as cited in Nguyen & Bui, 2015) argued depend on "what teachers do and think" (p.129). In this regard, Stritikus (as cited in Throop, 2007) based on California teacher's reaction to English Only policies argued that teacher beliefs, identity, and learning largely had impact on the implementation of language policy. Throop (2007) extended Stritikus' argument that those teacher factors can help to "create more equitable circumstances for their" learners (p.50). Nevertheless, Throop (2007) recommended that teachers are necessary to be aware about production and their role within language policy and planning. Moreover, the attainment of language policy and planning knowledge and teacher's role within language policy and planning will lead to the comprehension of how one's own teaching practice can create language policy (Throop, 2007, p.50). Overall, teachers need to see own contribution and policy makers should value teachers role in implementing language

policy. In the next paragraph the study describes NIS as trilingual implementation platform reviewing trilingual policy implementation studies from teaching and learning perspectives.

Nazarbayev Intellectual Schools: A New Language-in-Education Policy and Planning Platform

Nazarbayev Intellectual Schools (NIS) has been established by the Autonomous Educational Organization Nazarbayev Intellectual Schools (AEO NIS) in 2008 (Mehisto, 2015); see also Mehisto et. al., 2014). As a result, NIS created own curriculum, own professional development courses and assessment system (Law of the RK No. 394-IV 2011). In addition, there are other sub-agencies which promote and support NIS, for instance, Center for Educational Programs (CEP) which prepares curriculum and organizes teacher training pre-service courses for NIS and for all Kazakhstani schools distributing the best NIS practices across the comprehensive schools of Kazakhstan. The Center creates own professional development courses in corporation with international experts; for more detailed information there are recommended literature (Mehisto, 2015 see also Shamshidinova et al., 2014).

NIS set a few primary goals: (1) creation of NIS in each regions of Kazakhstan which become innovative platforms distributing innovative educational programs from pre-school to high school (Mehisto, 2015 see also Shamshidinova et al., 2014); (2) preparation of intelligent young generation who would be elite of the country who maintain and promote widely in the world Kazakh traditions and values (Mehisto, 2015; Nazarbayev, 2009); (3) cultivation of fluency in three languages (Kazakh , Russian and English) (Mehisto, 2015). The above mentioned goals would facilitate social cohesion and stability building “a common Kazakh sense of identity” (Mehisto, 2015, p. 115) and integrate Kazakhstani young generation to be the part of the world. Consequently, last five years there were a good few studies in trilingual

policy implementation in Kazakhstan secondary school context and the following paragraphs will review those past papers.

Currently there are some officially published past studies directly related to NIS trilingual policy implementation in NIS context (Khamidulina, 2016; Shegenova, 2016). These past studies have been conducted by local policy makers or experts who wanted to reveal trilingual policy benefits or challenges at classroom level. Both research findings used survey, face to face interviews, and group interviews. Shegenova's participants were history teachers who teach history of Kazakhstan from grade 7 in Kazakh for Russian-medium groups whereas Khamidulina's participants were local content and language teachers; international teachers and learners of grades 10 and 12. These past studies revealed that the main impediment in teaching in L2 is learners' low proficiency of Kazakh as L2; insufficient experience of academic subject teachers in Kazakh as L2 and in use of CLIL prior NIS. As a result in both studies most CLIL teachers wanted CLIL support or are recommended to attend CLIL seminars. Khamidulina (2016) revealed that learners' environment is Russian despite of the learners' L1 based on survey results. Shegenova recommended to review assessment requirements and to reduce content of units in History syllabus for Grade 7 or suggested to move some materials to grades 8 and 9 for Russian medium groups who study history of Kazakhstan in Kazakh as L2. Khamidulina recommended developing additional supporting tools or approaches or activities for learners' with low Kazakh as L2 and raise learners' motivation to learn Kazakh as L2. Overall, both studies at NIS content revealed that major issues were learners' inappropriate L2 levels for content subjects and insufficient CLIL teaching experiences proposing to make some changes in the content of the syllabus. The same sentiment or recommendation was echoed by Information Analytic Center (2017).

Another study reports local educators' understanding and attitudes toward trilingual policy implementation; Mehisto et. al. (2014) argued that local education authorities reflected about cultivation and promotion of trilingual language of instructions as challenging in their current levels. The educators expressed a big concern about content teachers who can conduct in English. Besides, researchers found out that there were lack of high quality Kazakh and English resources and English content resources (p.173); but the main issue was lack of knowledge and understanding about best international and national trilingual policy practices among their research participants (p.173). In short, those educators' resistance to reform resulted poor and inconsistent understanding of trilingual policy and planning procedures even though that time NIS had five years' experience at national level in implementing trilingual policy.

The latest past study related to trilingual policy and planning is unpublished doctoral thesis of Iyldyz (2017). This qualitative doctoral thesis examined piloting trilingual school teachers' understanding and beliefs in interpreting and in appropriating trilingual education policy in Kazakhstani context. The findings were obtained through interviews and classroom observations. The major findings were that all ten participants of content subjects accepted their roles as trilingual education implementers despite the revealed challenges as follows: insufficient appropriated textbooks, lack of proficiency, limited L2 trainings in methodology though, they found out ways to deal with them. Her study proposed significance of recognizing teacher as policy makers in Kazakhstan. Hence, Iyldyz defined that teachers of content subjects need professional pre-service trainings within trilingual policy implementation processes and recognition of teachers as central in language policy and planning based on her research framework.

Overall, NIS is a conduit of trilingual knowledge in Kazakhstan which is being implemented through various teaching approaches at classroom settings and one of such approaches will be discussed in the next theme.

CLIL Approach in Teaching Content Subjects in L2

Content Language Integrated Learning (CLIL) concept, term or approach in its short implementation time tended to be interpreted variously. CLIL term was coined in 1990s in Europe with two main goals: development of multilingual citizenship and development of multicultural environment and improvement of foreign language teaching methodology (Morton & Llinares, 2017, p 1). Cenoz, Genesee and Gorter (2014), Nikula, Dalton-Puffer and Llinares (2013) (see also Llinares, 2015) defined CLIL as educational approach in which second or foreign language is used as a medium of instruction for both learning and teaching academic content and language. As for NIS CLIL is one of the program and method or approach which is mandated for teaching content subjects (AEO NIS, 2013) and CLIL syllabi content had been built based on Coyle's four guiding principles or it is called 4Cs framework (2005):

Content- is the subject or project theme; Communication-language is a conduit for communication and for learning, interaction, language using to learn; Cognition-engagement: thinking and understanding. Bloom's Taxonomy services as an excellent checklist; Culture- self and other awareness/ citizenship; (p. 5)

Put it another way, every NIS academic subject syllabus is designed based on the above mentioned principles making the emphasis on content as central including other components or principles of CLIL for teaching content subjects.

Despite of the fact that Coyle's 4Cs are the basis for NIS CLIL syllabus design and lesson planning; The CLIL-Pyramid (Meyer, 2010) is the second framework which is embedded into Materials Policy area of the major language-in-education policy planning framework of the current study (Kaplan & Baldauf, 1997). In each corner of the CLIL-Pyramid base there are core components of CLIL 4Cs and the fifth corner of the pyramid is the top which connects all corners of pyramid. Meyer's (see also Sepešiová, 2015) CLIL-Pyramid is useful to understand lessons and material planning

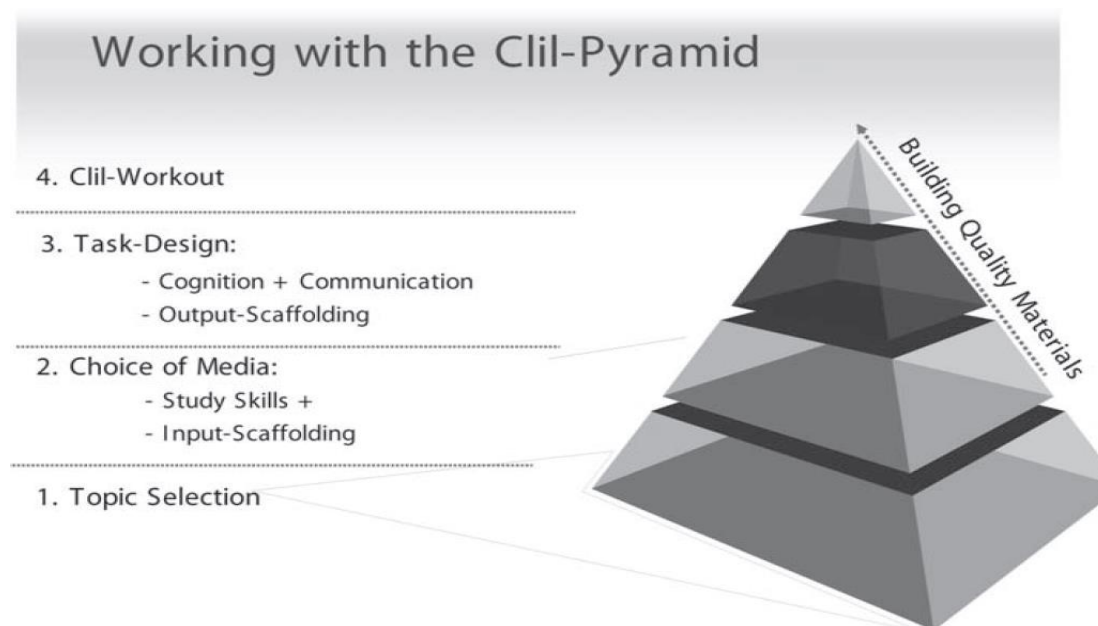


Figure 2. The CLIL-Pyramid (Meyer, 2010, p.24)

in the current study.

There are four layers of The CLIL-Pyramid. The first layer is *Topic selection*. In other words, teacher planning aims, learning outcomes and academic subject necessary features. The second layer contains “study skills” and “input –scaffolding” (Meyer, 2010). In this layer CLIL teacher should be aware of learning styles and levels of learners’ skills and such background knowledge is evenly kept throughout the lesson plan. *Input scaffolding* means that

teachers based on learners' background knowledge can implement various visual and audio aids bearing in mind importance of content development. Here teachers should decide how many and what kind of input scaffolding can be applicable to learners. In terms of scaffolding, Meyer (2010) proposed three reasons of necessity of scaffolding in CLIL classroom. It helps "to reduce the cognitive and linguistic load of content/input; supportive structures enable students accomplish a given task and" "scaffolding also supports language production (=pushed output)" (p. 15) through introducing key subject or content specific vocabularies and collocations help the learners to produce content relates thoughts. "...scaffolding done right will boost student's cognitive academic language proficiency" (p.15). In other words, scaffolding makes learners and teachers to succeed in leaning and teaching geography content in L2.

The third layer of the pyramid is *task-design* which has two principles: teacher should design higher order thinking tasks or develop students' higher order thinking skills organizing communication and collaboration among students (see also Sepešiová, 2015).

The fourth layer is *CLIL workout* is explained as final work of learners in the form of poster, presentation or debate. On the other hand the *CLIL workout* defines "how much and what kind of output scaffolding is necessary" (Meyer, 2010, p. 24; see also Sepešiová, 2015). Finally, CLIL is part of teaching which is used to conduct some subjects in L2 or in L3 within NIS materials policy dimension. The next theme describes and examines language role in teaching subjects in L2 to understand perceptions of challenges of geography teaches in this study.

Language Role in CLIL

As was mentioned above CLIL approach is mandated as one of the trilingual policy implementation tool in teaching non-linguistic subjects in Kazakh as L2 in NIS context since their foundation 2008 (AEO NIS, 2013; Mehisto, 2015). CLIL classroom-based research emphasized the significance of focusing on both language and content to explore “inherited connectedness” of form/language and meaning /content (Nikula et. al., 2013, p.75). In this regard, Systemic Functional Linguistics (SFL) as one of the CLIL research areas became more valuable in investigating CLIL classroom discourse (Nikula et. al, 2013 more information will be presented in the following paragraphs). For this research aim it is significant to examine language role within content in CLIL approach to analyze and interpret perceptions of geography teachers’ challenges in teaching in Kazakh as L2 in RMGs.

There are “four major strands” in CLIL research studies based on the sustained theoretical models: “cognitive second language acquisition theories; sociolinguistic models; classroom discourse models and systemic-functional linguistics” (Llinares, 2015, p. 61). As it was pointed above CLIL was modelled to develop students’ foreign language proficiency, therefore many studies were focused on second language acquisition (SLA) which examined learners’ second language competence and advantages of CLIL from cognitive aspect (see Ruiz de Zarobe & Jiménez Catalán, 2009 see also Llinares, 2015). A second main area examined perceptions of “social actors” (teachers, learners & parents) who are involved in CLIL program implementation and their attitudes toward the suggested new program in learning and teaching second language and content disciplines (Llinares, 2015, p. 61). As a result, two CLIL research fields were emerged: one investigated students’ motivation (Doiz, Lasagabaster & Sierra, 2014; see also Llinares, 2015). Another field explored identities and beliefs of teachers and students (Llinares, 2015; Hüttner, Dalton-Puffer, Smit, 2013).

The last two strands in CLIL are interrelated and they have proved the significance of classroom discourse analysis in CLIL to understand how content and language integration lead to the best teaching and learning (Cenoz et. al., 2014; Llinares, Morton, & Whittaker, 2012; Vollmer as cited in Llinares, 2015). CLIL at classroom level was examined from sociocultural, pragmatics (Nikula et. al., 2013) and from systemic functional linguistics perspectives (Llinares, 2015; Llinares et. al., 2012). Due to the study focus the last strand, Llinares et. al.'s framework will be further detailed in the following paragraphs. Nevertheless, this study does not focus on classroom discourse analysis whereas it is valuable to understand and differentiate when and where L2 should be used in teaching content subjects in the second language; it helps me to investigate perceptions of challenges in teaching geography in Kazakh as L2.

CLIL classroom learners are actively encouraged to participate in various interactions using foreign language (Coyle as cited in Devos, 2016). Interaction process before CLIL has been investigated within Interaction Hypothesis theory in SLA area (Larsen-Freeman & Long, 1991 see also Mayo & Basterrechea, 2017; Spada, 1985). In addition, Pica (2008) argues that “interaction, input”, output and modification” or “correction” (p.2) become one of the forefront of SLA environment theory and research. However, content and language researchers who explore classroom discourse features in CLIL lessons (Mayo & Basterrechea, 2017) contend that they know little about negotiated interaction, feedback and development of language forms in CLIL. Significance of language role in CLIL is well analyzed and presented in Llinares et al.'s (2012) three- part framework where language role in CLIL considers language development, classroom interaction and subject literacy areas (see also Nikula et. al., 2013). For further information on this subject, refer to Table 1 and analyses below.

Table 1

A three-part framework for understanding the roles of language in CLIL

SUBJECT LITERACIES	CLSSROOM INTERACTION	LANGUAGE DEVELOPMENT
GENRE	Instructional and regulative registers (focus)	Expressing ideational meanings (key concepts and understandings)
REGISTER	Communication systems (approach)	Expressing interpersonal meanings (social relationships, attitudes)
	Interaction patterns and scaffolding (action)	Expressing textual meanings (moving from more spoken to written forms of language)

According to Llinares et. al. (2012) the term *subject literacy* means spoken and written language (considers content subject texts) in CLIL classrooms (p.14). Past classroom interaction and comparative research on CLIL and L1 classrooms concluded that “some academic language features might require special attention while others might be learnt and developed through mere participation in classroom activities ” (Nikula et. al., 2013, p.88). In short, CLIL teachers should understand and choose content specific genre and register features to construct learners’ subject literacy in L2. Moreover, if they want to assess their learners’ subject knowledge progress in the second language (Llinares et. al., 2012, p. 14). In CLIL condition term *genre* considers those purposefully chosen varied content/subject texts that are understood and produced by CLIL classroom learners whereas term *register* deals with grammar and lexis of those written texts. The second component of the framework is *classroom language interaction*. This part consists of three leveled interactions which are based on Mortimer and Scott’s (as cited in Nikula, 2013) sociocultural model for science classrooms. CLIL teachers can explain and highlight (focus) necessary register and genre

features and negotiate meanings to establish meaningful communication using all possible communicative language skills to demonstrate knowledge about complex content phenomena (approach) (Llinares et. al., 2012).

Communication as an approach and CLIL teachers tend to organize content related communications. Meaningful content related dialogic interaction is important mechanism to display language role in CLIL (Llinares et. al., 2012). In CLIL condition Nikula et. al., (2013) stated that negotiating meaning leads to co-construction of content (p. 76). In addition, scaffolding as part of classroom interaction component is explained as “specific intervention” for acquisition of content knowledge and necessary parts of language and literacy skills and “the variety of ways” to support CLIL learners “to express meanings in the classroom” (Llinares et. al., 2012, p.17)

The third component of the framework is *language development* which occurs in three areas. First, learners develop or acquire necessary subject related lexis and grammar structures which are functioned in specific contexts. The second is promotion of linguistic resources in classroom interaction if it is regarded as a social space where learners should meet social needs. Within this framework *interpersonal meaning* is defined as articulation of different attitudes and judgements relating to the obtained content knowledge. And the third is moving from spontaneous speech to more academic speech learning written forms of language as part of learners’ “linguistic capital” (Bourdieu as cited in Llinares et. al., 2012).

Assessment is seen as important instrument which is appeared in every part of teaching process. During all teaching stages it is required determination of content goals and then assessment tasks or “language and literacy (genres and registers)” (Llinares et. al., 2012, p.18) to attain planned goals. In CLIL context assessment for learning or as they call “dynamic

assessment” (p. 18) is important or can be fruitful for CLIL because learners can get feedback after each performance checking them whether learners are on right way or not.

Overall, it is seen that within CLIL approach language plays crucial role and it is inseparable part of any teaching and learning contexts and those subject teachers should be able to recognize language features inside any teaching content.

Conceptual Framework

I reviewed interconnected above mentioned themes based on LPP and LiEPP based on the overarching research questions. Major points of language-in-education policy and planning in this study considered Curriculum Policy, Personnel Policy, Materials Policy, and Community Policy. Each LiEPP policy dimension is crucial to explore challenges in teaching geography in Kazakh as L2. As a rule, each language-in education policy and planning has own curriculum policy features and NIS is not exception; within trilingual policy content teachers are obliged to use CLIL in teaching subjects in Kazakh as L2. Consequently, CLIL as part of language-in-education policies it was reviewed separately defining its teaching components based on Meyer’s (2010) framework. The CLIL-Pyramid framework is embedded into Materials Policy. Finally, to have an objective framework for understanding language challenges in teaching in Kazakh as L2 in CLIL condition the study reviewed and interpreted language role in CLIL. As was mentioned above language cannot exist without content therefore, the third framework-language role in CLIL exists in each layer of the CLIL-Pyramid. Overall, all reviewed materials and past studies helped to construct the study framework and to answer the posited research questions from language-in-education policy and planning perspective.

Chapter 3: Research Methodology

Introduction

This chapter presents the study's qualitative methodology part. The chapter contains research design and justification of the selection, selection and sampling procedure, data collection procedure and data analyses to answer the following research questions:

1. What kind of challenges do geography teachers face teaching in Kazakh as L2 in Russian medium groups (RMGs)?

Sub-questions: i. what are teachers' perceptions of students' Kazakh as L2 proficiency level?

ii. What are teachers' perceptions of teaching materials?

2. What practices do teachers use to address these challenges?

3. How do they perceive the role of students' environment in learning subjects in Kazakh as L2?

The following section describes current study's ethical considerations, and in the last section I describe how I positioned myself as a researcher in the sites, limitations during data collection processes.

Research Design

To investigate L2 teaching challenges the study utilizes a qualitative research design approach, which is frequently described "as a naturalistic, interpretative approach, concerned with exploring phenomena" (Ormston, Spencer, Barnard and Snape, 2014, p. 3). Put it another way, within qualitative research design it is explored "real-world settings and the researcher does not attempt to manipulate the phenomenon of interest (e.g., a group, event, program, community, relationship, or interaction)" (Patton, 2001, p. 39).

There were three data generation instruments: one was face to face interviews and the second was non-participant observations and the third is document analysis. The qualitative

approach to the study is justified as the goal is to explore and to understand (Creswell, 2014) L2 teaching challenges presenting ‘behaviors and actions that lie beneath the surface’ (Cohen, Manion & Morrison, 2003, p.219). In short, if I interview I can generate detailed information which lies beneath comparing to classroom observations where you can see only stages of lessons without realizing teaching issues because teachers do not present their teaching or planning difficulties in classroom settings.

There was one the first studies about trilingual education policy and implementation processes in Kazakhstani context. Qualitative empirical data at Ministry of Education and Science level was conducted which was titled *Development of Strategic directions for education:Reforms in Kazakhstan for 2015-2020 project* (‘Roadmap Project’ as cited in Mehisto et. al., 2014) the main purpose of the Road map Project was to find out trilingual education implementation difficulties at local settings. At the same time, Mehisto et. al., (2014) carried out qualitative case study research using qualitative face-to face and group interviews in six schools within three different regions. Another large-scale mixed methods research was utilized at Nazarbayev Intellectual Schools last year (Shegenova, 2016): NIS project examined advantages and disadvantages in teaching “History of Kazakhstan” in the second Language (Kazakh L2)’ with quantitative survey, qualitative interviews and classroom observations. In addition, in higher education system, at governmental level there was a research project which was implemented at Graduate School of Education at Nazarbayev University in partnership with the University of Cambridge Faculty of Education examining challenges of pre-service teacher training utilizing qualitative interview-based research design (Kambatyrova & Iyldyz, 2015). Thus, the current study will add information “to describe” perceptions of teaching challenges in Kazakh as L2 ‘in detail’ (Ashley, 2012, p.102) as part of

trilingual education which becomes the cornerstone of the newly emerging research field in Kazakhstani context.

However, implementing qualitative research design where the researcher actively participates and enters to “the worlds of the interacting individuals” (Denzin, 1978a as cited in Patton, 2001, p. 48) may affect to objective evaluation. Consequently, if a researcher is even-tempered, impartial it is presumed to lessen bias. Without introspective analysis of other people’s feelings the researcher cannot fully understand viewpoints of respondents and their teaching behavior in L2 in this study nevertheless. Qualitative research design allowed me to understand and to discern challenges teaching in Kazakh as L2 from how “others think, act, and feel” (Patton, 2001, p. 49).

Site and Sampling

In this section I will describe the research sites, the population and the sampling procedure of the study. Also, detailed background information of interviewing participants and some information about the observing class participants.

Research site. I selected two Nazarbayev Intellectual Schools from northern and western part of Kazakhstan. There are four Nazarbayev Intellectual schools in the western part of Kazakhstan and six NIS in the northern territories of the country in each city centers of oblasts. I selected NIS as they implement trilingual education initiative. And the second reason of my choice was that I could explore the role of language environment in teaching and learning subjects in Kazakh as L2 or variability of the state language status in various parts of Kazakhstan studying people in their environment. From historical perspective northern territory was more Russified than the western part of the country as a result of Soviet language policy (Grenoble, 2003). As Creswell (2014) stated “one objective of qualitative research is to present the complexity of a site” (p. 231). Richness of sites could provide in-depth information

for the study (Patton as cited in Creswell, 2014). The first NIS site I labelled NIS 1 and the second one I called NIS 2.

Research sample. I used multiple samples within the study because they present different stakeholders “with a distinctive locus in relation to” (Ritchie et al, 2014, p. 118) the inquiry questions. Purposeful sampling was used to gain access to “knowledgeable people” (Ball, as cited in Cohen, Manion & Morrison, 2003). To attain understanding of teachers’ perception of challenges in teaching geography in Kazakh as L2 study participants were selected from northern and western parts (for more detailed information refer to Tables 2 & 3 of this Chapter).

For interviews I selected middle secondary class (7th, 8th, and 9th grade) teachers at those NIS sites students enroll from Grade 7. I could compare what challenges L2 teachers come across within two NIS sites; what teaching approaches implement to deal with challenges and how learners’ environment role can influence for learning subjects in Kazakh as L2 in northern and western parts of Kazakhstan. Participants teaching experiences prior NIS was not focus of this study, however, some participants compared NIS and past teaching styles in the interviewing process.

As for classroom observation initially I planned to observe only Grade 7 but teachers of both sites did not want me to observe their Grade 7. Consequently, I observed Grades 8 in NIS 1 and Grade 9 in NIS 2 (information about learners are provided in Table 3 in this Chapter). Through observing learners’ L2 language environment the study could discern what practices teachers used in teaching geography in L2 and the role of students’ environment in learning geography in L2.

Gaining access procedure. The main part of data collection procedure is gaining access to the sites and individuals. Prior to the data collection process I sent two information

letters for two NIS principals. They contained several pieces of information (1) the study purpose, (2) the necessity of sites and data collection dates (3) how the collected data would make enduring contribution in trilingual education into the Kazakhstani education system (4) and the study would be conducted keeping in mind research ethics principles. Recruiting procedures of the participants were similar for both sites where I spent a week per site. After getting permission to the sites, I met with head of departments to get a list of all L2 subject teachers and to explain the purpose of the study. Then I sent several letters inviting the potential participants for the study. Then I selected two geography teachers based on the study's purpose who taught geography in the middle secondary grades (at 7th, 8th and 9th). The following day I met with each teacher individually where I presented and explained the purpose of the study guaranteeing confidentiality, "withholding participants' real names and other identifying characteristics" (Bogdan & Biklen as cited in Cohen et. al., 2003, p. 228). Informed consent forms were signed by both sides: signed copies of the documents were given to the participants (see Appendix A).

Before the classroom observation I met with participants and explained the purpose of the study and the importance of the study considering research confidentiality: they were given parental informed consent forms to sign; then the appointed day students returned back parental informed consent forms to me and I returned back one copy of the signed document for each student. (see Appendix B Consent Forms).

Information on the study participants. As mentioned above, teachers' background experiences were not so important; nonetheless there were some differences in their teaching experiences. In NIS 1, Aigul had 20 year of teaching experiences. Before NIS she taught geography only in Kazakh-medium groups. Tamara had more than 25 years of experience and she also taught geography in Kazakh medium groups before she was recruited teaching

geography in Kazakh as L2 in Russian-medium groups. In NIS 2, Sara had 15 years of past experience in teaching geography in Kazakh medium groups. The second teacher from NIS 2, Aizhan, had no teaching experience before NIS.

Table 2

Information on the Study Interviewees

Site	Pseudonyms	General Years of Experience	Teaching Grades at NIS
NIS 1	Aigul	20 years	7, 10, 11
NIS 1	Tamara	more than 25 years	7, 8, 10
NIS 2	Aizhan	no experience before NIS	7, 8, 10
NIS 2	Sara	15 years	7, 8, 9

As stated above I observed four times two Russian medium groups within the two sites. In chosen NIS sites learners enroll from the 7th grade. Consequently, in both sites Russian-medium groups start learning geography in Kazakh as L2 from the Grade 7. Initially I planned to observe Grade 7 in both sites but teachers from both NIS did not wish to be observed and they just described those beginning challenges in teaching geography in Kazakh as L2 from retrospective perspectives. In NIS 1 there were 12 students, four of them representatives of other ethnicities and Kazakh language can be their L3 but as I did not examine learners it cannot possible to evaluate to what extent Kazakh is their L2 or L3. In NIS 2, there were 9 students in the 9th grade. The table below presents some background information about the interviewed and observed participants of the study.

Table 3

Information on the Observed Participants

Site	Grade	Learning in L2	RMGs Size	Ethnicity
NIS 1	8	from NIS	12	4 of them non-ethnic Kazakhs
NIS 2	9	from NIS	9	all are ethnic Kazakhs

Data Collection Instruments and Procedures

The study used several data collection instruments as follows: semi-structured interviews, observations and document analysis.

Data collection started in two different periods which lasted for one week for each site. In NIS 1 I interviewed two teachers from November 24, 2016 then one of them was chosen for two classroom observations' during that week. After those classroom observations I interviewed the observed teacher. The same procedures were followed in NIS 2 beginning December 10, 2016.

In total, I interviewed six times and observed four times within two sites. Having collected the data, I transcribed all six interviews and four observations and proceeded to analyze them. The next sections present data collection instruments and procedures which were used in the study.

Interviews. The first instrument to collect the data was interview, Patton (2001) points out the main idea of the interview is “to allow us to enter into the other person’s perspective” (p. 341). In addition to understand how teachers organized lesson plans and attached activities in teaching geography in Kazakh as L2 I used semi-structured interviews as it gave me the opportunity to ask additional questions for clarification or for additional information in

specifying the previously mentioned statements. According to Patton (2002) semi-structured interview is called as “interview guide approach” (as cited in Braun & Clarke, 2013, p. 78). In this respect Patton (2001) highlights relative advantages of semi- structured interview:

the interview guide provides topics or subject areas within which the interviewer is free to explore, probe, and ask questions that will elucidate and illuminate that particular subject. (p. 343)

I designed 15 questions for all (two teachers from each NIS) geography teachers for the first semi-structured interviews and during follow-ups after two classroom observations at the same grade in a site I asked questions about the observed lessons (see Appendix C).

Piloting interviews. Two weeks before the data collection I piloted my interview questions three times; the first time I interviewed my peer student in research class after getting valuable feedback from the peer Master student, and second time I was recorded by academic English instructors and got valuable feedback for improvements. Two piloting interviews were in English but my actual interviewees L1 were Kazakh: that is why; I tested my interview questions with Kazakh language teacher who taught me last fall term. I could handle to finish my interviewing on time (30 minutes); however, she recommended me to hone and refine some question wording and to omit too detailed questions about the participants’ background information as that information did not answer my research questions. During the piloting semi-structured interview I realized the power of this instrument as I asked probing questions which provided more detailed answers, as Braun and Clarke (2013) stated “ In addition to your main questions, prompts and probes encourage participants to open up, expand on their answers and provide more detail” (p.84). In short, probing questions can help understand my participants’ viewpoints more clearly and find more strong pieces of evidence to the study research questions.

Interview procedures. Having polished the interviewed questions on the planned day I interviewed the research participants. The purpose of the interviews were to gather information from two NIS geography teachers who work at secondary middle level about their perceptions of geography teaching challenges in Kazakh as L2 in Russian-medium groups. In follow-up interviews I could ask questions related to the observed lessons to clarify and to understand their teaching experiences or perceptions about challenges. All interviews were and classroom observations were recorded with the participants' consent.

The first interview lasted 30 minutes. There were some specific challenges in each site. The most apparent challenge was finding safe place for interviewing. All four teachers were at work during the interviewing time and we could not leave the sites. As a result first four interviews were rescheduled for afternoon time. Another challenge was that when I visited NIS 2 it was the end of the semester and the participants were much overloaded with other things except teaching, for example Aizhan was asked to organize one part time event for coming Independence Day. Sara also participated in that event, conducted lessons and printed hundred piles of summative papers. Consequently, I had to wait for Sara till the end of the working day for interview and Aizhan asked to reschedule the interview to another day. All participants were very open and some participants told more information during probing questions nevertheless.

The second follow-up interviewing cycle lasted for 15 minutes in each site. After four classroom observations I interviewed Tamara and Sara. Initially, the follow-up interviews focused on L2 learning and teaching challenges, and what activities or strategies the teachers used addressing the content and language challenges in Kazakh as L2. During the interviewing process I asked teachers to share with me their syllabi to get more understanding of L2 teaching features and those documents could provide comprehensive synthesis and valid

analysis on L2 teaching challenges within the study. As they promised a week later they sent me geography syllabi of 8th and 9th grades. That time I understood why geography teachers did not prepare for Russian and Kazakh medium groups separately, both mediums are taught with one syllabus. It is important to highlight that at data collection periods in the follow up interviews previously observed two teachers became friendlier and felt themselves more comfortable reflecting and analyzing L2 teaching challenges more openly I think, previously established trust, rapport and respect had great positive impact on them.

Observation: Description of Protocols

The second instrument was classroom observation. Flick argues that “observation enables the researcher to find out how something factually works or occurs” (p.222 as cited in Ritchie et al, 2014, p.255). As my presence might influence learners’ behaviors or interaction patterns I decided to observe one grade twice per site to reduce the researcher’s observation influence (Ritchie et.al, 2014). But in the reality, I observed all grades one day twice and this aspect is described in limitation part of this chapter. I selected a complete observer position, as it helped me to understand how teachers addressed L2 teaching challenges and to what extent learners’ L2 proficiency level was problem in teaching geography in Kazakh as L2. I observed the “interactional setting” and the “program setting” (see Appendix D) (Ritchie et.al, 2014, p. 254). In interactional setting I focused on formal and informal interaction patterns between teacher and students and student with student patterns. The latter setting allowed me to examine how learners and teachers cope with L2 issues in practice. Based on the research questions it was clear what should be observed to collect relevant information to the study.

Observation procedures. I used classroom observation technique to “validate and crosscheck findings” (Patton, 2001, p.306) in other words for triangulation process. After identifying L2 teaching perceptions and theories I observed Tamara’s and Sara’s lessons

twice. The main idea of classroom observations were to understand and discern real teaching challenges in L2 and to what extent Russian medium students learning environment help them to address those L2 learning challenges in practice. In both sites in the first observation I focused on physical setting, students' behavior and relationship with each other; whether their learning atmosphere was friendly, comfortable, and supportive. It lasted for 15-20 minutes. In NIS 1 and in NIS 2 in the second classroom observation I focused on the interactional setting and the program setting (see Appendix D). Those two settings were intertwined together as interaction happened when the teacher asked question or when students were given various tasks in pairs and in groups. As I was non-participant observer, I could see theoretical and practical intersections in teaching and in learning in L2 and some difficulties.

Document / Syllabi Analysis

Approach and procedures. The third instrument of the study is document analysis. As I mentioned before, for document analysis I used 8th and 9th grade syllabi which were given by the participants. Examining the given documents I found out that there are many teaching activities with useful resources. I checked some of the suggested links as resources and I revealed that some of them opened but some of them did not open. There are certain learning objectives for each chapter and the subthemes which can help teachers in planning lessons and in preparing tasks with assessment criteria. Indeed, L2 teachers get various supports to address challenges in teaching subject in Kazakh as L2 further and sample syllabi layout can be seen in Appendix F.

Combined multiple data, from interviews, observations and documents have been sought to answer the research questions and to achieve the purpose of the study. In the following section of the study explains how the stored data was analyzed with coincident research approaches.

Data Analysis Approach

In this part of the section I describe how I managed and examined the generated data. After I saved taped data from interviews with primary consent of the participants all gathered data were stored in the special folder on my laptop, protected with the unique password. In the second step I transcribed 6 interviews and typed four observation field notes. As Lofland (as cited in Patton, 2001, p. 306) notes “for the actual writing of the notes may take as long or longer than did the observation”, really, I wrote detailed field notes a few days. Both transcription of interviews and writing field notes took much time than I expected. The duration of the interviews and observations ranged from 15 to 40 minutes. Having transcribed interviews and written notes, I started reading and examining each interview in a meticulous way to comprehend for the next data analysis stage. In the following stage, I used NVivo software program for Windows PC to code and to categorize the data into themes. At that stage I created major 4 themes (Appendix E) which related to the major research questions such as (1) Educational experience, (2) L2 challenges in teaching, (3) addressing L2 teaching challenges during preparation for class and (4) teaching innovations in L2 classroom I included the last category as during interviews I was told that NIS implements Content and Language Integrated Learning (CLIL) as new teaching program and method for teaching some subjects in Kazakh as L2. This study’s second (Mayer, 2010) and third framework (Llinares et. al.) could help understand challenges teaching geography in Kazakh as L2. Through second layer of the Pyramid I could examine what input and scaffolding strategies are implemented and what teaching materials are needed in L2 whereas third framework could delineate main language usage areas and how language development is happening in CLIL class. Moreover, I could explore within third framework what geography teacher do to address to those faced L2 teaching challenges.

Ethical Considerations

This section describes research ethics of the study. I will describe how I was given permission and how the participants and the delivered data anonymity and confidentiality were protected.

During the NUGSE Ethics form preparation I briefly explained the study purpose, the research questions, the research design, sampling and instruments. Additionally, I described how I protect confidentiality and anonymity of the participants and the sites in the approval form. The study was approved on the 4th of November, 2016 by NUGSE Research Committee.

One of the requirements of the ethics review was to prepare the research Consent Forms for multiple categories of the participants. The study Informed Consent forms comprised (1) purpose of the study, (2) time allocated for each instrument, (3) risks and benefits of the study with guaranteeing confidentiality and anonymity of the participants and the gathered data, (4) NUGSE Research Committee contact number and my Thesis Supervisor's e-mail address. The written Consent Forms helped me when I went to the sites. It took me not so much time to convince the potential participants that there were not apparent risks in taking part in the study. Also I explained that all gathered data would be stored in the special folder on my laptop, protected with the unique password. No one except the researcher (me) and my Thesis Supervisor would have an access to the information. And after the analysing the data all the stored information would be deleted from all folders and laptops. Thus, I can say that I followed all the research ethics rules providing anonymity and confidentiality of the research participants. I will delete all the information after the successful thesis submission.

How I Position Myself in The Study

Before the data collection process I knew my position as a teacher who worked with university students and NIS students and as Kazakh speaker. I spent much time teaching and interacting with colleagues and with students. Every time I supported all students without selecting them as “lubimchik/ i”(favorites).

In data collection period I positioned myself as an emergent researcher, as the participants’ colleagues and even as friend who can professionally support with necessary sources or who can show understanding as a professional friend. For example, during data collection periods I was asked to recommend some IELTS books for better preparation whereas in another case I had to reschedule my interviews from morning to afternoon time as that day the study participants were asked to help by head of department.

Limitations

Limitations of the study are related classroom observations. Initially I had to observe two different days one classroom. But I attended double lessons of each class during data collection weeks in two sites. I noticed when I stayed for the second time at the same day the students started interacting with each other only in Kazakh in one of the sites. According to Matthews and Ross (2010) when people know that they are observed their behaviours can change. They refer to the Hawthorne effect, for example, in 1933 Mayo presented overt observation research findings where he analysed “working conditions effect on employees' performance” between 1927 and 1932 (p.259). He summarized the main findings as follows: “employees work harder and are more productive when they know they are being observed” (p.260). In other words, when I observed one day twice the same class I noticed that learners tried to speak in Kazakh in the second lesson when they addressed to each other in team or pair work in preparation stage. It demonstrates that sometimes a researcher can influence therefore the obtained results cannot show the reality.

Perceptions of teachers in this study cannot be generalized to all NIS as the size of participants is small in this study.

Conclusion

The purpose of this chapter was to explain and discuss how I collected data, answering the research questions. In addition, I gave the rationale of using the methods. As it was required, I wrote the rationale of using the specific research design, and then described the research participants recruiting process, and the research instruments. Then I wrote how I analysed data and in final stage I depicted research ethics of the study. The above examined aspects of the study will be a baseline to discuss the next chapters of the study Findings and Discussion.

Chapter 4: Findings

Introduction

This chapter presents findings related to the study. Based on the study goal was explored geography teachers' perception of challenges in teaching geography in Kazakh as L2 at Russian-medium groups. The data analyzed and revealed five themes which were pertinent to the following research questions: What kind of challenges do geography teachers face teaching in Kazakh as L2 to Russian medium groups (RMGs)?

Sub-questions: i. what are teachers' perceptions of students' Kazakh as L2 proficiency level?

ii. What are teachers' perceptions of teaching materials?

2. What practices do teachers use to address these challenges?

3. How do they perceive the role of students' environment in learning subjects in Kazakh as L2?

They are as follows (1) learners' community: unevenly developed L2 proficiency as challenge in Kazakh as L2; (2) perceptions of materials; (3) trainings of teachers pool and various leveled collaboration to address challenge in teaching geography in L2; (4) CLIL as a tool to deal with challenges in teaching geography in Kazakh as L2 practice; and (5) teachers' perception about the role of communities in learning subjects in L2. This chapter is organized according to these themes.

In this chapter, to maintain the anonymity and confidentiality of the study subjects, all participants of the research will be referred by pseudonyms (Aigul, NIS 1; Tamara, NIS 1; Aizhan, NIS 2; Sara, NIS 2). NIS 1 is located in the northern and NIS 2 is in the western parts of Kazakhstan.

Learners' Community: Unevenly Developed L2 Proficiency as Challenge

This theme discusses the findings pertaining to the Research Question 1 of the study, what kind of challenges do geography teachers face teaching in Kazakh as L2 for Russian-medium groups? The participants were asked to share what issues they encounter when planning and delivering lessons.

Finding #1: Students' heterogenic proficiency in Kazakh. The overriding finding of the study about challenges in teaching L2 learners was varied and unevenly developed L2 skills personally and within one grade. All geography teachers who participated in this study expressed the same sentiment:

...each learner's L2 skills developed variously. Some of them are good at speaking and listening, others are good at reading and writing in teaching and learning geography in Kazakh as L2. Before NIS they attended different schools and were taught Kazakh as L2 subject and, that time they had already developed some skills better than others and this is the one of the reasons of their heterogenic L2 proficiency. Here, the Kazakh language as subject is being taught too in Russian-medium groups.”
(Aigul, NIS 1)

Finding #2: Lack of spoken proficiency/pronunciation geography in L2. All teachers described the pronunciation of learners in L2 at geography lessons as follows. For example, “when students interpret the reading texts orally their accents cause difficulty for other learners who have low level of Kazakh to comprehend their peers' delivery at the lesson” (Aigul, NIS 2). One of the participants from NIS 1 echoed this statement with “L2 challenging moments in pronouncing... scholarly terms” (Tamara, NIS 1).

The classroom observations revealed that some learners pronounced with great effort L2 terms during group presentations. But for some learners pronunciation of the key terms in L2 did not seem a challenge. It meant that in each group the learners' Kazakh- -as-L2 levels

are various from person to person; that is why based on findings it can be appropriate to claim that only a few learners were struggling in pronouncing specific geographical key terms. During the follow-up interviewing Sara highlighted that "...at presentation stage some of them could not pronounce properly some terms and I echoed the correct pronunciations ... they do not pronounce and use those terms in their everyday interactions in L2" (NIS 2). For instance, in both schools students struggled with expressing their thoughts and present their subject material with appropriate vocabulary. They frequently misspoke and used wrong words. When they hesitated for a longer period of time, their teachers stepped in and filled in the silence with their own input on the given topic. By doing so, they sometimes contributed to the presentation more than learners. Thus, only some students can have challenges in speaking and in pronouncing words in L2.

Finding #3: Unevenly developed L2 writing and speaking skills. Findings from the classroom observations and interviews revealed that a few learners who were actively engaged in speaking struggled in producing variety of sentences in written tasks in L2. For instance, in NIS 1 in classroom observations, the learners were asked to write mini-essay style answers to various questions and after seven minutes four learners out of 12 had read their written sentences. One learner who did not participate actively in speaking task could compose variety of meaningful sentences with complex, compound structures in comparison with the rest learners who read aloud. In CLIL condition students' dialogic interactions were different than language classes. In geography classes learners dialogic interactions focused on content information than every day dialogic conversations as in language classes.

I did not understand during classroom observations why a girl resisted speaking in L2. But, in the follow up interview Tamara commented on the collected mini essays' responses and described each of the learner's written paragraphs. She added that that girl who produced

well written sentences in L2 has improved her writing but she did not want to speak in L2 in front of the class. As I found out she came from another NIS recently. According to Tamara's claim and my classroom observations the study revealed that only a few of the learners could use L2 sentences with various structures. Simultaneously Tamara also claimed that "their writing is poor because of low L2 proficiency level. ...a huge amount of time is required to create a piece of writing for the classes, however, their speaking are rather good and meaningful as they use key vocabularies of a topic and develop their sentence around them in L2 " (Tamara, NIS1). Also, such thought was stated by Aizhan: "a few learners need much time in writing in Kazakh as L2 in my class I noticed when they are given much time their written works are rather good than those written ones under pressure, but in oral presentations they are leaders"(NIS 2).

Finding #4: Lack of academic vocabulary proficiency in teaching geography in

L2. All participants acknowledge that the learners had difficulty in understand the meanings of content related academic words and phrases. Some participants (Sara, NIS 2; Tamara, NIS 1) were concerned that when modifying the language to suit the level of the learners, geography-specific scientific terminology in Kazakh is jeopardized: for instance, "we use simple Kazakh as L2.... the most dangerous thing is that ...we are losing the scientific character of geography in Russian-medium groups" (Tamara, NIS 1). Thus, inadequate academic vocabulary proficiency in L2 can cause challenge in doing connected assignments or activities based on the written or listening texts in L2, it can impede the learners' comprehension process and demand much time for task completion in L2. Nevertheless participants firmly believe that the situation in the nearest future will be improved and the status of Kazakh will be more valued among Russian medium learners as a result of studying some subjects in Kazakh as one of media of instruction within trilingual education policy in Kazakhstani context.

Perceptions of Materials

In the following paragraphs I will describe two more themes within the obtained data that address the second subquestion of the first research question about materials. I will focus on L2 resources in teaching geography in L2, and the syllabi and their function in planning lessons.

Finding #5: Necessities of alternative resources. For the vast majority of participants, resources and teaching materials seemed enough in teaching geography in Kazakh as L2. They were very satisfied telling that they retrieve online materials from Twig-Bilim site or from suggested syllabi links. Nevertheless, only one of the participants from NIS 1 commented that:

...resources in Kazakh are very limited and difficult to find especially composed texts for L2 learners and scientifically content related illustrations. Sometimes I find such resources for my lessons but their access are limited it means that I should pay for further usage. (Tamara, NIS 1)

The essence of her argument is that Tamara spends some amount of time in finding more appropriate e-resources during lesson planning stage. Moreover, she added that website “Twig Bilim¹” has many educational illustrative resources in Kazakh as L2 for geography lessons. She wished more variety of resources for each topic where Geography teachers would have choice. The next theme identifies the syllabi role in teaching geography in Kazakh as L2 in RMGs and L1 in KMGs.

¹Twig Bilim is a website where NIS teachers have free access to educational videos with question tasks whose length ranges from 3 to 5 minutes.

Finding # 6: Syllabi and their function in planning geography lessons in Kazakh as L2 and L1. All teachers admitted the role of syllabi as significant in terms of planning. During interviews I revealed that all participants conduct in both Kazakh and Russian medium groups and it was described as follows:

All theoretical materials, learning objectives and assessment requirements are similar for both mediums...I plan lessons based on syllabi learning objectives for both Kazakh and Russian grades; during teaching I can cover all materials what I planned for Kazakh medium groups. But for Russian medium groups I need more time and they lag behind... of course we should not compare L1 and L2 learners' language capacities. (Sara, NIS 2).

Yet Sara feels that learners who are from RMGs have quite different Kazakh proficiency, she did not claim that having the same syllabi with the same learning objectives and assessment rubrics are challenging in teaching geography in Kazakh as L2. As well as the rest participants who did not consider the same syllabi as challenge. They just described the fact that they search for another resources in planning Russian medium lessons. For more understanding of NIS syllabi structure the study suggests a brief description of it in the following passage.

In the main body of the syllabi, there are five columned contents in it. The first column include general geography chapter titles; in the second teaching aims and objectives, in the third column there are teaching activities and techniques; the fourth column embraces teaching instructions which are connected with the previous column activities and in the final column there are suggested teaching and learning resources for each separate teaching aims (general course plan for 8th and 9th grades) (see Appendix F). In sum, participants valued all kinds of pre-service trainings organized by NIS or CEP calling them as valuable professional

assets and the ways to address faced L2 teaching challenges. However, the syllabi role for Kazakh medium planning and teaching were significant with all suggested resources and activities as Kazakh is their L1 in this context: whereas the same syllabi for Russian medium groups did not help much in planning or in addressing the teaching challenges because instruction language, Kazakh is L2 in this context.

Training of Teacher Pool and Various Leveled Collaborations to Address Challenges in Teaching Geography in L2

The third theme of this chapter is about how NIS supported L2 teachers to tackle the challenges in teaching geography in Kazakh as L2. Various trainings at CEP, teachers' collaborations, and NIS syllabi were crucial for geography teachers because none of the study participants taught geography in Kazakh as L2 in Russian-medium groups before NIS, especially on CLIL. According to Sara (NIS 2) "CLIL is specially designed approach for teaching subjects in L2". Aigul from NIS 1 also defined CLIL as "content and language integrated teaching". CLIL for Tamara (NIS 1) is an approach "integrated content and L2 tasks with simple and complex questions". Similarly, as for Aizhan (NIS 2) CLIL means a set of activities where content and L2 will be developed". Overall, the study participants indicated that CLIL's main idea is the development of content with L2 using various activities. The first paragraph will describe how geography teachers attended trainings and professional development courses. In the further findings the study will state about lesson planning preparation with the rest colleagues within a department.

Finding #7 Trainings for Implementation of CLIL Approach in NIS System.

Evaluating their experiences as L2 geography teachers, participants articulated local NIS trainings and professional development seminars organized by Center for Educational Programs² [CEP] as significant foundation that impacted on their teaching trajectory.

Basically, participant Tamara from NIS 1 highlighted trainings and professional supports as important assets in addressing practical challenges in L2 teaching:

I participated in CLIL seminar ...for three days. There were shown various practical activities; I still implement them in my lessons to address L2 teaching challenges... close or open questions, information gap activity in CLIL, critical thinking questions or open and close questions based on Bloom's Taxonomy and other communicative activities for L2 teaching. (Tamara, NIS 1)

In other words, it is seen that the attended seminars contributed to the teaching experience on the process of becoming L2 teacher in her classroom teaching. Similarly, another participant summed the attended seminars as follows: "those CLIL strategies from seminars are very useful... I can say that with CLIL strategies.... pupils learn unconsciously key words of the topic" (Aigul, NIS 1). Participants of this study who teach at NIS 2 also attended these seminars and highlighted their significance. In fact, all participants celebrated the fact that those seminars equipped participants with techniques to address challenges in teaching geography in Kazakh as L2.

² CEP – it is a part of NIS organization which designs NIS syllabi and invites NIS teachers for professional development seminars.

Moreover, in the classroom observations it was seen that CLIL strategies permeated every part of the lesson. For instance, teachers from both sites implemented scaffolding strategies to activate the learners' previous knowledge and to introduce new topic tasks or other assignments using relevant videos, matching activities, working with various maps, mini-essay writings or oral presentations as a group work. Tamara, participant from NIS 1 during classroom observations, used pictures to introduce flora of particular geographical zones, maps, and matching exercise where the learners compared each zone's different characteristics of within various continents. In other words, various teaching modalities such as maps, pictures, and specially prepared matching activities with key terms were used to help the learners to get the right meaning of the key words or to understand other sequencing assignments correctly in L2. In addition, in both sites the learners were suggested to watch the educational videos in L2 for 3 minutes to comprehend the topic better.

As Sara from NIS 2 claimed, "Since I started working at NIS, I attended many different seminars relating to teaching geography also teaching it in Kazakh as L2, approximately 2-3 times. Last five years CLIL related seminars were very significant for teaching geography in Kazakh as L2" (Sara, NIS 2). Hence, the professional development trainings were valuable macro level decisions at CEP and at NIS levels which could support micro level agents in teaching geography in Kazakh as L2. The next paragraph will describe about staff collaboration and local CLIL workshops as assets in lesson planning and useful activities to address the teaching challenges.

Finding #8: The role of staff collaboration and local CLIL workshops. All participants described sharing and collaboration with other geography teachers as helpful process in addressing challenges, designing lesson plans, and choosing more efficient

strategies to explain new concepts or topics in geography in Kazakh as L2. On this,

Geography teacher Aigul from NIS 1 commented that:

...at department meetings we share and plan lessons for both Kazakh and Russian groups...For example, what strategies I will use in my lessons I will explain to my colleagues...and vice-versa, discuss with each other what activities or strategies we implemented successfully and which ones we can put for the beginning, middle for the final parts of the lessons. In sharing processes we also discuss techniques to develop speaking, reading and writing skills in L2. (Aigul, NIS 1)

This kind of professional support from Aigul's perspective is valuable as she was excited in describing the sharing process with the rest of the staff. The importance of exchanging lesson planning decisions with the colleagues was commented by another participant in the same way: "...we always discuss what and how implement activities to reach any lesson objectives ..." (Sara, NIS 1). Moreover, teachers from NIS 2 stated the importance of initially organized CLIL workshops where teachers from various subjects present CLIL experience theory and practice: "those teachers who have attended CLIL seminars in CEP after arrival they organize CLIL workshops. If I think that those demonstrated CLIL activities will help to develop my students' language and content knowledge then I borrow for my teaching" (Aizhan, NIS 2). Thus, NIS participants are sure that such professional interactions and local staff collaborations gave them confidence in settling L2 challenges.

CLIL as a Tool to Deal with Challenges in Teaching Geography in Kazakh as L2

Practice

When it comes to teaching practice, there are some common teaching approaches and activities which are used in any classroom practices regardless of medium of instruction whereas some of them can practically be significant in CLIL approach dealing with teaching

issues in L2 classroom. They are: slowed down L2 speech flow in teaching for beginners, classroom materials in teaching geography in L2, vocabulary acquisition in L2 content balanced learner and teacher-directed activities, adapting readings for learning geography in L2. In the following paragraphs below the above defined CLIL activities will be explained in depth.

Finding # 9: L2 pace of speaking for beginners. Many of the participants emphasized that they slowed down Kazakh as L2 for the 7th grades because learners are accepted at NIS from grade 7 and they experience learning geography in Kazakh as L2 for the first time. One of the participants explained that situation as follows:

Now they are at the 10th grade but when I started teaching them at the 7th grade I slowed down my Kazakh speech... today I do not slow down my speech in Kazakh because they understand my Kazakh in its natural pace. (Aigul, NIS 2)

The essence of her argument is that as time passes they do not necessarily implement that language technique in teaching geography in Kazakh as L2 groups.

So, as it was explained above slowing down L2 teaching speech for the 7th graders is regarded as a temporary challenge in L2 teaching practice.

Finding # 10: Implementation of rich input and pushed output in CLIL in teaching geography in L2. All participants (4 out of 4) stated that in geography lessons maps, educational videos from “Twig Bilim” web site and pictures are the major visual aids in addressing the teaching challenges in L2. All interviewees claimed that in the beginning of the lessons they can show relevant pictures of nature without directly saying a new content of a lesson. As it is understood the learners are prepared to communicate negotiated key concepts and meanings. Expressing own interpersonal attitudes through deducing the meaning of new

content from the presented pictures learners move from spoken to written forms of language.

Tamara's comment about maps can be a case in point:

one of the valuable sources are maps and atlas maps, we do not need words there are standardized signs in maps...the learners explore and work with maps to answer the given questions or create their own questions to other peers or for me. (NIS 1)

Hence, teachers used maps to explain and to highlight specific the topic related genre and register or to make the learners visualize the presented information in Kazakh as L2.

In NIS 2, during classroom observations Sara used an atlas of the world when she discussed Australia's flora and fauna. Also the learners watched a video about Australia. After watching the video, in the second stage of the task learners express textual meanings in written form after watching the video which helped to develop L2 skills; students had to fill in a table about Australian flora, fauna, and its agriculture and inhabitants' specific trade based on its zones using atlas for further group presentation.

Similarly, in the first NIS, at every part of the lesson during classroom observations Tamara used maps and videos from "Twig Bilim" and the topic related pictures to make the learners to understand the information rapidly in L2. In short, Tamara has chosen various multi-media developing L2 skills. Simultaneously the learners used maps to present two countries which are situated at various geographical zones referring to the various maps as they examined climate, flora and fauna and agricultural aspects of the countries, in this respect, the teacher develop the learners' L2 through meaningful communication using all possible resources. In sum, the research found that all possible resources or modalities are considered and implemented in developing students' geography knowledge in Kazakh as L2. In the following paragraph participants discuss how they address vocabulary teaching challenge in L2.

Finding #11: Vocabulary acquisitions in L2 content. All participants (4 out of 4) claimed that L2 learners had difficulties in understanding key terms because key words are not used in everyday lexicon. Sara from NIS 2 stated that

...as learners do not use key terms in their everyday lives they had difficulties in understanding in L2 so I translate them into L1 or even into L3 into English as it is a part of the trilingual education policy objectives. Also every learner has vocabulary copybooks where they write L1 definitions in parallel with L2 definitions. After getting the meanings in L1 they can work with L2 terms within the L2 contexts well. (Sara, NIS 2)

In other words, the geography teachers used all possible opportunities to explain rarely used geographical terms as easy as possible through matching activities, supporting the terms with pictures and translating them into three languages as they believe that knowledge of key terms in three languages is part of trilingual education policy in NIS context.

Another Geography teacher shared with her own experience how she tackles the difficulties in introducing the key terms in Kazakh as L2: “all key terms are related to nature so I use relevant pictures or video excerpts of nature which help my learners to understand better their meanings in L2” (Aizhan, NIS 2). The third Geography teacher echoed the previous participant idea in working with content vocabulary: “key terms of geography are related to nature and I can use pictures where that or this natural phenomenon described or I

can use appropriate short videos...” (Tamara, NIS 1). According to Aigul CLIL³ is the best strategy in introducing new terms of a lesson:

CLIL strategy is especially designed approach for L2 teaching where teacher has to integrate content and L2 for learners to explain the subject content. I can say one of the CLIL strategies where the learners come across the terms three times unconsciously. First time when they write what they remember from the board through running dictation activity; second time in the given context where the learners fill in gap with those words from the board then in the third time I gave the learners the previous readings but in separate sentences and they are to reconstruct that previous seen texts. Each time after each activity I gave for each group my own feedback and comment or explain some words if the learners ask me or sometimes I ask them to evaluate the learning process; to what extent they can infer the right meanings of words within the given texts. (Aigul, NIS 1)

Aigul highlighted that she purposefully selects content specific texts with key words developing learners’ academic L2 and giving opportunity to communicate meaningfully expressing own thoughts during putting written information in correct order. As they expressed the balanced integrated language and content knowledge can reduce learning and teaching challenges.

In classroom observations teachers of both NIS translated some key terms into the learners’ L1 in checking their responses and in both sites learners are suggested matching

³ As I started collecting the data at the end of the term I did not see such vocabulary learning activities with CLIL method during classroom observations.

exercises and they also used those words in their presentation stage. In this regard, from CLIL condition teachers' implemented scaffolding strategy supporting and giving confidence for further meaningful L2 negotiation of content information. Thus, all geography teachers implement various CLIL approaches and L2 teaching scaffolding approaches which can be the most appropriate for a particular grade in introducing key terms in L2 based on Meyer 's (2010) framework.

Finding #12: Adapting reading for learning geography in L2. From the given syllabi the study participants pointed out that they do some elaborative modifications to the texts in Kazakh as L2. All participants described that they adapt and shorten the length of Kazakh geographical texts, keeping the only major ideas with key vocabularies: "I prepare the same lesson plan for both Russian and Kazakh mediums but for Russian-medium groups I shorten and use graded Kazakh texts " (Aizhan, NIS 2). In other words, participants made conscious adjustment as part of scaffolding strategy in CLIL setting. Using one syllabus for different mediums was not considered positively or negatively. All participants were very neutral in describing the same syllabi.

Teachers' Perceptions about The Role of Communities in Learning Subjects in L2

The last theme of this chapter relates to the third research question about the role of learners' environment in learning geography in L2. The obtained data from both sites revealed similar findings related to learners' environment and its role in learning subjects in L2. Though, initially I expected to reveal differences from northern and from western parts of Kazakhstan from historical perspective about learners' environment and its function in learning subjects in Kazakh as L2 in Russian-medium groups.

Finding #13: Learners' classroom informal interactions. All participants claimed that learners' environment are Russified and it can be perceived as challenge. I revealed that

participants from two perspectives referred to learners' environment. The first perspective is when learners interact around the classroom in and during breaks and when teachers hear their informal peer interactions. Secondly, home or parental environment was perceived as positive or negative environment in acquisition of Kazakh. Participants inferred such statement based on parental meetings where they talked with their learners' parents.

Classroom observations and interviews revealed that "Learners tended to address in Russian in clarifying or asking something from each other in classroom setting and during the break time" (Aizhan, NIS 2). Moreover, in classroom observations I also noticed that in most cases learners ask and answer each other's questions in their L1. But teachers hope that in the nearest future this tendency would be visa-versa; "...language environment of the learners can be changed from L1 into L2 if they see that they will use Kazakh in their future lives" (Tamara, NIS 1). Overall, all teacher from both sites claimed that learners readily interact in Russian when they are not controlled and during the breaks and it perceived as challenge in learning subjects in Kazakh as L2.

Finding #14: Home language environment and parental influence. Parental community and parents attitudes were perceived as challenge if parents are not involved in learners' success in overcoming L2 barriers in learning content subjects. Sara echoed the above mentioned statement as follows:

"We can see whose language environment is L1 or mixed L1 and L2 at home. When parents came to the meetings during our conversations I see that those students whose Kazakh as L2 are good consequently their parents or grandparents mostly speak in Kazakh than in Russian vice versa those students whose Kazakh as L2 were very low or poor their parents speak in Russian and sometimes with difficulty can say some

Kazakh words during the parental NIS meetings” But some parents claim that they purposefully use Kazakh at home. (NIS 2)

In short, parental language and internal attitudes can be perceived as influential factors if they purposefully continue speaking in Kazakh and it is an asset for development of learners’ environment in Kazakh as L2. So, parents’ language and their attitudes can be significant in developing learners’ environment in Kazakh as L2.

Finding # 15: NIS as L2 language environment for L2 learners. As a result of trilingual policy in NIS other subjects besides geography are taught in Kazakh as L2 consequently, such process have great positive impact on Russian –medium learners’ language environment because several other subjects are taught in Kazakh as well for Russian-medium learners creating opportunities to acquire Kazakh as second language as soon as possible. One of the participants commented NIS as Kazakh exposure:

I had one student who is now at the 11th grade, he is not ethnic Kazakh and his living environment was Russian but at present his Kazakh as L2 is perfect he speaks freely in Kazakh and I can say that it is due to NIS knowledge and its natural language environment [which] helped him achieve such phenomenal results as all students spend here all day long. (Sara, NIS 2)

In other words, she believes that NIS as language environment and natural Kazakh exposure can support and improve learning geography in Kazakh as L2. Additionally, NIS learners’ language environment can be considered as a significant factor in the academic achievement of those learners who want to improve Kazakh as L2 level. Moreover, the learning environment is supported externally through many other extra-curricular events in Kazakh in whole academic year as reported by the participants. They have “weeks of languages” where three language teachers , Kazakh, Russian and English organize at local level various activities

and competitions involving NIS learners. Also, learners are involved in summer project which is titled “One week in a village”; they are given an opportunity to spend one week in Kazakh speaking villages in summer holidays with their curators. After the arrival students are to present about their experiences to their peers in Kazakh. Thus, NIS Kazakh language environment has great impact on Russian speaking learners’ linguistic environment letting the learners to immerse the Kazakh speaking environment naturally.

Conclusion

The overriding findings revealed that learners’ who study geography in Kazakh as L2 had various L2 skills and it follows other language related issues challenging teachers of geography in Kazakh as L2 in Russian-medium classrooms. Moreover, learner’s individual environments can be regarded as challenge or help in learning subjects in L2 in both sites. However, in both sites’ teachers’ perceived NIS as a crucial environment condition for promoting L1, L2 or L3. Neither NIS 1 nor NIS 2 considers teaching resources and subject syllabus as challenges.

CEP and NIS trainings, staff collaborations and local workshops were significant to plan geography lessons in Kazakh as L2 and to cope with teaching challenges in everyday teaching practices. During classroom observations participants utilized various activities in CLIL condition to overcome challenges in practice. Participants implemented various scaffolding strategies and supplied rich input (Meyer, 2010) to address faced challenges in teaching and in learning geography content in L2.

Chapter 5: Discussion of the Findings

Introduction

In the previous chapter the study described the research findings. This chapter aim is to present discussion of the findings. The major categories of classroom challenges and ways of addressing challenges were coded, analyzed and organized. Categories and subcategories were created, guided by the following research questions:

1. What kind of challenges do geography teachers face teaching in Kazakh as L2 to Russian medium groups (RMGs)?
Sub-questions: i. what are teachers' perceptions of students' Kazakh as L2 proficiency level?
ii. What are teachers' perceptions of teaching materials?
2. What practices do teachers use to address these challenges?
3. How do they perceive the role of students' environment in learning subjects in Kazakh as L2?

The finding and analyses were driven by the conceptual framework, as described in Chapter 2 which is based on three theoretical frameworks; the first is language-in- education planning framework (Kaplan & Baladauf, 1997), the second is Meyer's (2010)CLIL-Pyramid framework which is embedded into the methods part of Kaplan and Baldauf's model and the third framework is Llinares, Morton and Whittaker's (2012) framework which demonstrates the second language role in CLIL within the CLIL-Pyramid layers.

Chapter Outline

This chapter has four main sections: Learners' L2 proficiency gap which speaks to Findings from 1 till 4 (1); Materials are not challenging factor examines Finding 5(2); NIS Curriculum Policy role in teaching content subjects speaks to Finding 6 (3); Pre-service teacher training Policy to overcome teaching and planning issues considers Findings 7 and 8 (4); CLIL as

policy implementation method in classroom practice to cope with barriers speaks Findings 9 and 12 (5); Community Policy and learners' environment role in learning geography in Kazakh as L2 speaks Findings from 13 till 15 (6).

Learners' L2 Proficiency Gap

In reflecting teachers' perceptions of challenges in teaching in Kazakh as L2 in Russian-medium groups at NIS 1 and at NIS 2, both sites denoted learners' non-homogenously developed Kazakh as L2 challenge. This pattern was explained from second language acquisition perspective that learner cannot acquire "receptive-productive" skills homogeneously "because different facets of development proceed at different paces" (Larsen-Freeman, 2014, p.10). Moreover, pronunciation was not regarded as a major issue in CLIL condition by CLIL scholars (Dalton-Puffer, 2008; Llinares et. al., 2012).

There is additional explanation of such challenge that CLIL teachers should understand and recognize genre and register features of content texts for further supporting with necessary grammar and lexis of those written texts (Llinares et. al., 2012). Classroom observations revealed that participants implemented different kinds of audio-visual aids in the first level of classroom instruction focusing on instructional and regulative registers preparing to communication where students are involved in production of meaningful output where L2 is "a resource for meaning" which embraces "multiple systems" (Coffin, 2017, p.94). As a result, learners provide three "different types of meanings" (Coffin, 2017, p.94) – ideational meanings; interpersonal meanings; and textual meanings (Llinares et. al., 2012). However, I did not observe teachers' explanation of necessary academic sentence patterns and "cohesive devices" (Coffin, 2017, p. 96) which enable learners' to understand the significance of L2 in "construing the world (*the content* of our lives) – both the real world (i.e. material phenomena) and the more theorized, *virtual* world of academia (i.e., conceptual, abstract phenomena)"

(Coffin, 2017, p. 96) In addition, Mehisto, Marsh and Frigols (as cited in Mayo & Basterrechea, 2017) argue that a distinctive feature of CLIL is dialogic model. In other words, meaningful turn-taking interactions between learners and teachers in CLIL classrooms are important component to attain complex content related phenomena (Llinares et. al., 2012). In addition, negotiation of meaning during interactions and communication in CLIL lessons will help to “co-construct the complex content meanings” in the second language (Nikula et. al., 2013, p. 89).

As for the academic vocabulary proficiency in both sites there were some students who did not understand vocabulary in Kazakh as L2. In such cases teachers suggested L1 or L3 translations though most learners started learning Kazakh as a subject from the primary schooling years in Kazakhstani context. Johnson and Swain (1994) contend that learners attain more conversational proficiency when learning second language as subject than academic proficiency. Tsui (2010) echoed the same sentiment that without reaching a threshold level (see also Cummins, 2005), students cannot achieve academic progress in learning content subjects in L2 as media of instruction that is why most learners in learning geography in Kazakh as L2 faced with difficulty. Also, Llinares et. al.’s third component focused on development of L2 in CLIL examining key words and supporting understanding of those words, then giving opportunity to express the learners’ and in the last level learners’ learn to express the previous information in written form. In this term, Afitska (2015) argues that learning a subject in second language needs more language support activities if learners skills are not fluent in second language consequently, it will slow and make less effective attainment of content knowledge in L2. The main idea of her proposed approach enables learners and teachers “to divert attention away from the new language and towards the new concepts” (Afitska, 2015, p. 77).

Another common challenge within this category was that some students experienced difficulty in processing information in the beginning in learning geography in L2 at the beginning of grade 7. And the above pointed challenge was consistent with past research, for instance, Johnson & Swain (1994 see also Pica, 2008) claim that some students who are engaged in late learning subjects in L2 can experience difficulty in comprehending stream of data in L2 at the beginning of few weeks or even a month. Thus, it is significant to understand learners L2 levels of comprehension at the beginning of learning when they are involved in studying subjects in Kazakh as L2 in the mid of their schooling age.

Materials are Not Challenging Factor

Materials is one of the segments in implementation of language-in-education policy as through materials teachers can develop lesson plans meeting with implementation processes. All participants stated that they could upload materials from the subject suggested syllabi content and adapt them for further L2 teaching. They also retrieved video materials from Twig Bilim website where there are many subject related videos with compiled higher order thinking questions. Relevancy and availability of diverse teaching and learning materials can support teachers for further successful classroom teaching (Kaplan & Baldauf, 1997; Liddicoat, 2004).

Curriculum Policy Role in Teaching Content Subjects in L2

Neither teachers from NIS 1 nor teachers from NIS 2 considered syllabi as challenge in teaching geography in Kazakh as L2 in RMGs, however, participants used the same syllabi for both mediums (Kazakh and Russian) with similar aims, assessment tasks and resources with the same expected outcomes. However, Information Analytic Center (2017) and Shegenova (2016) recommend changing syllabi for Russian-medium groups who study History of Kazakhstan in Kazakh as L2. Moreover, I can argue that the study participants could not

understand and realize consciously CLIL syllabi as a problem. However, as Liddicoat (2014b) defined “the change in language has significant pedagogical consequences pedagogical practices in educating students in their first language are substantively different from those required for educating students in a language they do not speak” (p.126).

As it was known all study participants had a few year experiences in teaching subjects in Kazakh L2 and this can be another reason that they could not professionally evaluate the differences of teaching in L1 and in L2. They needed consistent pre-service trainings as was recommended by Information Analytic Center, (2017), Khamidulina (2016), and Shegenova (2016) to better understand differences in teaching subjects in L1 or in L2. Such approach in late immersion program was defined as “false hope” because late immersion students’ L2 proficiency is not as in L1 proficiency (Johnson & Swain, 1994, p.224). Also, based on different locations of education organizations syllabus or course plan or curriculum content in trilingual policy should be adjusted as recommended by Information Analytic Center (2017). Curriculum is important asset in language-in education policy (Kaplan & Baldauf, 1997) which reflects what teachers will do at classroom level.

Pre-Service Teacher Training Policy to Overcome Teaching and Planning Issues

The data revealed that all participants prior to NIS did not teach geography in Kazakh as L2. That is why any kinds of pre-service CLIL teacher trainings, workshops and peer collaborations were perceived as one of the ways to address the faced challenges in classroom settings in teaching geography in Kazakh as L2. Consideration of teaching pool and nature of pre-service preparation are the aspects of Personnel Policy within language-in-education policy and planning (Kaplan & Baldauf, 1997).

As stated in the previous research “teachers are the agents of change, and success of an innovation in teaching is to a large extent determined by their acceptance and ownership of the

innovation” (Carless, 2001; Markee, 1997; Nunan as cited in Ellili-Cherif, 2014, p. 214; Throop, 2007). As for collaboration, Mourshed et al. (2010) argued that collaborative practices is one of the significant component of the most improved school systems in the world that professional collaborative practices “hardwires” hidden teachers values and beliefs accumulating them into “a form manifest in day-to-day teaching practice” (p.74). Moreover, Ruby & McLaughlin (2014) who reviewed past forty years of reforms in education sphere suggested that “a model of collegiality and a community of professional practice” can be one of the basic strategies to transfer to or to accept reform.

Another revealed approach in the findings against the challenges in teaching geography in Kazakh as L2 is reflective sharing in the staff level with peer teachers. Ayubaeva valued of reflective practice of teachers and its implication for teacher learning (as cited in McLaughlin et al, 2014). Her unpublished doctoral study reported that some degree of peer collaboration can strengthen teachers’ self-confidence, guide to student-centered teaching and can help to identify and overcome with teaching challenges (p.240). Overall, pre-service trainings, professional reflective interactions are important policy stage in implementation of language-in education policy and planning which can and should provide successful teaching practice of school subjects in any language of media at classroom settings.

CLIL as Policy Implementation Method in Classroom Practice to Cope with Barriers

As for teaching process teachers implemented CLIL activities to overcome classroom teaching barriers in conducting geography in Kazakh as L2 in RMGs. Within NIS CLIL is mandated implementation planning component for teaching academic subjects in L2 or in L3 (AEO NIS, 2013) and CLIL programs and course plans are created based on Coyle’s (2005) 4Cs. However, CLIL lesson procedures in this study will be analyzed through Meyer’s (2010) CLIL-Pyramid layers (2010) highlighting the role of language in CLIL (Llinares et. al., 2012).

Findings revealed that all participants in this study implemented as Meyer (2010) defined rich input and scaffolding strategies in explaining materials: pictures, maps, online videos from Twig-Bilim website, graded readings, As for vocabulary translations here, geography teachers help to develop second language learners' proficiency expressing ideational meanings in L1 and in L3 giving opportunity to understand key concepts for further content knowledge attainment (Llinares et. al., 2012) ; from Meyer's (2010) framework it called as scaffolding process which entails learners to understand further the target language information. Moreover, from third language learning and teaching perspective Tarnopolsky & Goodman (2014) shed light on the importance of using limited L1 to understand "the target language structure and communication in it" and other social aspects of the target language "if not overused" (p.395).

In classroom observations it was revealed that teachers prepared various tasks to develop learners' content skills. For example, comparison of zones, ecosystems, watching educational short videos and asking higher order questions which were seen on the board. From Meyer's CLIL-Pyramid all those tasks were purposefully designed to develop learners skills; it is very important stage when teachers bring various designed tasks to develop learners higher order thinking skills triggering to further meaningful communication in L2 (Meyer, 2010).

Finally, in most stages of the lesson learners worked in teams or in pairs during completing the given task. All learners interacted in their first language and in the second language to understand that or this meaning basis on the task. In this regard, Llinares et. al.' (2012) classroom interaction component can be excellent example to understand language role in teaching and learning content. As for team or pair work in output stage which is titled as "Workout" (Meyer, 2010) Sepešiová (2015) described that such interactive and collaborative

patterns can help to “achieve language, content and learning outcomes” (p.131). Indeed, various group or pair work help learners to gain confidence and it creates less stressful situation from being failed raising learners’ motivation.

Overall, in CLIL condition it is significant to bind input and scaffolding strategies bearing in mind learners’ heterogenic L2 levels in teaching subjects in Kazakh as L2.

Community Policy and Learners’ Environment Role in Learning Geography in Kazakh as L2.

Learners’ “informal environment” (Spada. 1985) was described as more of a challenge than formal language environment, as participants reported. In other words, informal environment of learners was perceived their break time and home environment whereas formal was explained from teachers’ perspective learners’ in class environment during the lesson.

Scholars writing about the formal environment of late immersion pedagogy state that L1 interaction let learners to save time preventing from misunderstanding of L2 information and frustration (Johnson & Swain, 1994, p. 216). As was mentioned above meaningful limited use of L1 will facilitate to better understand and perceive quicker the given L 2 information. Moreover, a language develops through social interaction when learners’ exchange information “in supportive interactive environment” (Vigotsky as cited in Lightbown & Spada, 2013, p. 25).

As for home language environment, Schmid (2014) pointed if two learners grow up in a similar condition under the same home language environment they will not have the same command of parents’ language/s or languages of that environment (p. 388). In other words, home language environment should not be regarded as an issue in learning subjects in Kazakh as L2 because second language acquisition is mostly dependent on personal characteristics of an individual and less dependent on parents’ language proficiency that preferred speaking in

Russian in L1 than in Kazakh as L2 at NIS parental meetings. Nevertheless, when learner acquires second language several people's attitudes to the learner can be (Larsen-Freeman & Long, 1991, p. 175) crucial, for instance, the attitudes of his or her parents, peers, teachers, ethnicity (Larsen- Freeman & Long, 1991, p. 178; Smagulova, 2016). Thus, main target of Community policy is to find and accommodate approaches and attract parents, learners and other community members to support learners' in learning subjects in second or in third languages.

Another environment in this study finding is NIS which organizes extra-curricular events as Summer School, "one week in the village" or other meaningful exciting events which facilitate development of L1, L2 and L3. Kaplan and Baldauf (1997) mentioned that beyond the classroom, educators and students live in the community. Consequently, there are different concerns and attitudes related to educational system in the living community. And the task of this language –in-education planning area is like general language policy planning to achieve certain change in community behavior mediating the challenges in the frame of proposed change. This finding is consistent with language –in education policy and planning theory studies (Kaplan & Baldauf, 1997; Liddicoat, 2013). On the other hand from second language acquisition view "informal contact" can lead to successful improvement of language proficiency under stage if it is planned and "real and sustained use situations" (p. 44) are occurred (Krashen as cited in Spada, 1985). In short, learners improve and develop their L2 through natural interactions (Ortega, 2009). As Kaplan and Baldauf (1997) mentioned that creation of various approaches toward community attitudes is important aspect in language-in-education policy and planning for successful implementation through different part time activities which nurture and enhance learners' L1, L2 or L3 environments.

Conclusion

This chapter's purpose was to discuss the previous chapter findings based on the reviewed literature. All revealed findings of the past chapter have been deeply analyzed and discussed. Learners' L2 proficiency gap as non-homogenous is natural SLA phenomenon. If it is not sufficiently developed then teachers have to pay attention on L2 development strategies bearing in mind learners' proficiency. Moreover, implementing CLIL scaffolding strategies and conscious adjustments of content materials will give opportunity to reduce learners' L2 challenges. Participants did not consider L2 materials as challenge. In addition teachers did not perceive the syllabi as challenge; however, past studies claimed and recommended to change the content of the syllabi for those who study subjects in L2 in Kazakh or in Russian and make syllabi adjustments based on locations of NIS in trilingual policy. Preservice trainings are important in language-in-education policy and the right prepared teachers are the key in successful policy implementation. CLIL is very important tool and program to address to teaching and learning challenges in NIS context. Based on the learners' environment according to teachers learners' environment did not seem so big challenges as it was stated in findings, but purposefully organized NIS extra-curricular events can enhance L1, L2 and L3 proficiency levels giving opportunity to acquire the languages in free condition without pressure.

Chapter 6: Conclusion

The purpose of this qualitative study was to explore with a sample of geography teachers their perceptions of challenges in teaching geography in Kazakh as L2 in Russian-medium groups. The conclusion from this study follows the research questions and the findings therefore address three areas: (1) what kind of challenges geography teachers face in teaching in Kazakh as L2 to RMGs; (2) what practices teachers use to address these challenges; (3) how teachers' perceive students environment in learning subjects in Kazakh as L2. Following is the discussion of the main findings which are pertinent to the study frameworks and conclusion drawn from this research. It is followed by the recommendations and a final reflection on this study.

What kind of challenges geography teachers face in teaching in Kazakh as L1 to RMGs

The first major finding of this study research is that the majority of participants in this study indicated that the learners' heterogenic developed L2 skills challenged geography teaching in Kazakh as L2 to Russian-medium groups. A conclusion to be drawn from this finding is that it is a normal challenge from SLA perspective. Moreover, pronunciation in CLIL was not seen as a challenge based on past studies. However, from teachers' perceptions teaching materials were not an issue in teaching geography in Kazakh as L2 to RMGs. In addition, geography syllabi which were used in both mediums were not perceived as challenges. In this regard, it can be also concluded that the same geography syllabi could not be regarded as a challenge because those CLIL teachers had a few years of teaching practices in Kazakh as L2 context. International and local past studies have proved the necessity of separation of syllabi content, teaching and learning objectives for different mediums referring to various learners' natural development capacities based on L1 and L2 in accordance with past studies.

What Practices Teachers Use to Address These Challenges

The second major finding was that all participants reported that NIS and CEP pre-service trainings and initial staff subject teachers' collaborative reflections with each other were the most valuable assets in teaching geography in Kazakh as L2 to RMGs. All participants celebrated that those seminars helped them to overcome teaching challenges where they were introduced CLIL method for teaching geography in Kazakh as L2. A conclusion that can be drawn from this finding is that all above mentioned findings were in agreement with past studies proving that new successful educational reform with highly qualified teaching staff requires such changes. CLIL as part of trilingual policy implementation in secondary school enabled subject teachers to deal with L2 teaching issues implementing rich input and scaffolding where learners presented meaningful comprehensible output through interaction developing L2 for further attainment of contextual complex information.

How Teachers' Perceive Students' Environment in Learning Subjects in Kazakh as L2

The third research question related findings revealed similar results for both NIS highlighting learners environment as challenge in certain cases; moreover, NIS as environment was perceived as important environment with extra-curricular events which led students to enhance their three language proficiency. The primary conclusion that can be drawn from this is that home and informal environment were not seen as big issue in learning subjects in Kazakh because from retrospective future teachers hope that learners' environment can be changed from L1 into L2 if they understand consciously usefulness of Kazakh in their social lives.

Recommendations

I offer recommendations based on the findings, discussions and conclusions of this study. The recommendations that follow are for (1) recommendations for subject teachers; (2) recommendations for local policy- experts; and (3) recommendations for further research.

Recommendations for subject teachers. Content teachers have to work with language teachers, attend CLIL seminars and conduct action research. Teacher of content subject who teach some subjects in Kazakh or in Russian as L2 should take sufficient time to find out as much about not only content in planning lessons implementing CLIL, but, equally as important, development of second language content related register and genre features based on this study's third framework which is focused on examination of CLIL communication or interaction aspect. Attendance of various school or other seminars and professional development courses can push to understand CLIL's rich input and scaffolding integrating literacy development through classroom interaction components which will develop learners L2 skills creating opportunities for learners to acquire content knowledge easily with provide feedback for further improvements. And thirdly I recommend to conduct action research studies because it is very important part of professional development which enables teachers to cope with teaching challenges and in this regard, professional reflections and analysis of own teaching based on past studies will strengthen CLIL teaching practice; as it is a new teaching strand within trilingual policy in Kazakhstani context. Overall, teachers are key trilingual policy implementers who should develop purposefully own professional qualifications within new education reform.

Recommendations for local / NIS trilingual policy experts. Local policy-experts are people who prepare foundations for successful implementation planning or issues various legal documents and supporting or organizing implementation processes within any formal

language-in-education policies. Therefore as was found out it is important to develop constant CLIL trainings and to revise syllabi content. Firstly, it is recommended to organize online formal training programs in CLIL for content teachers to support those teachers who have a few years of experiences in teaching subjects. It is known that 20 NIS are located in various parts of Kazakhstan and every month content teachers or local experts physically cannot organize face to face meetings. Secondly, local experts are recommended to revise and improve Syllabi content based on past studies findings and considering RMGs L2 development levels in certain grades. As was recommended in one of the previous studies it would be more welcomed if local experts bear in mind the status of the official language from sociolinguistics perspective in each part of Kazakhstan in appropriating syllabi content for each L2 class.

Recommendations for further research: The researchers are recommended further studies be conducted to develop larger database of information to get more comprehensive understanding of challenges in teaching in Kazakh or in Russian as L2. Such large data base can reveal holistic patterns peculiar for NIS as organization; future obtained data can show general patterns of challenges, ways of addressing or understand more explicitly common learners' environments and their roles in learning subjects in L2. Or future researchers can make comparative studies of classes where one subject are taught or learnt in both mediums in Kazakh but for Kazakh-mediums Kazakh is L1 whilst for Russian-mediums Kazakh is L2. I suppose that such comparative studies will define where and how content and language scaffolding strategies are necessary to cope with teaching challenges in L2 classes. In addition, the real experts in learners' environment can be learners themselves and their parents. That is why within this study learners' environment role data can be considered as superficial and for the following similar study I would include learners and parents as a future study participants.

Limitations

There are several limitations of this study first, it cannot be generalized to whole NIS geography teachers' because of the participants size and number of sites therefore this study cannot reveal general patterns of challenges of geography teachers in teaching geography in Kazakh as L2 within NIS organization; secondly, learners' environment role was investigated from teachers' perceptions without examining learners or their parents perceptions. And thirdly, in each site I could not observe one class in a separate day because of the end of the term and the following week all learners had not classes in NIS context.

Conclusion

As I come to the close of the study it is important to highlight that I examined and reviewed many studies to answer my research questions, design the research instruments and create the study frameworks. This study has been a sign of collaborative efforts of participants who found time and showed willingness to share with their experiences which enhanced the study itself. At the same time, looking back for all processes I believe that this study can be one of the first and tiny contributions to language-in-education policy and planning which can be continued in Kazakhstani context.

As a final point, I consider that this study will be useful not only for geography teachers but for all other teachers who practice or implement teaching content subjects in L2 or in L3. I hope that the local policy-makers can see from language-in-education policies where teachers need improvements in teaching content subjects in Kazakh or in Russian as L2 in further accommodation of syllabi to RMGs. Overall, I conclude with the words of Wharton

“there are two ways of spreading light: to be candle or the mirror that reflects it” (Bloomberg & Volpe, p. 211).

References

- AEO NIS (Autonomous Educational Organisation Nazarbayev Intellectual Schools) (2013). *The Trilingual Implementation Guidelines for the Nazarbayev Intellectual Schools*. Astana: AEO NIS.
- Afitska, O. (2015). Scaffolding learning: Developing materials to support the learning of science and language by non-native English-speaking students. *Innovation in Language Learning and teaching*, 10(2), 75-89.
- Baldauf, J. (2006). Rearticulating the case for micro language planning in a language ecology context. *Current Issues in Language Planning*, 7(2&3).
- Baldauf, R. Li, & Zhao, S. (2010). Language acquisition management inside and outside the school. In B. Spolsky & Hult, F. M. *The handbook of educational linguistics* (235-251). Oxford, UK: Wiley-Blackwell.
- Birkner, V.A. (2016). Revisiting input and output hypotheses in second language learning. *Asian Education Studies*. 1(1), 19-22. doi:10.20849/aes.v1i1.18
- Bloomberg, L.D. & Volpe, M. (2008). *Completing your qualitative dissertation: A road map from beginning to end*. Los Angeles: Sage.
- Board of AEO NIS, (2015). *Instruction for the Summer School organization in Nazarbayev Intellectual School*. Retrieved from [http://nis.edu.kz/site/nis/repository/file/projects/SummerSchool/%D0%9B%D0%B5%D1%82%D0%BD%D1%8F%D1%8F%20%D1%88%D0%BA%D0%BE%D0%BB%D0%B0%20\(%D0%98%D0%BD%D1%81%D1%82%D1%80%D1%83%D0%BA%D1%86%D0%B8%D1%8F\)%20eng.pdf](http://nis.edu.kz/site/nis/repository/file/projects/SummerSchool/%D0%9B%D0%B5%D1%82%D0%BD%D1%8F%D1%8F%20%D1%88%D0%BA%D0%BE%D0%BB%D0%B0%20(%D0%98%D0%BD%D1%81%D1%82%D1%80%D1%83%D0%BA%D1%86%D0%B8%D1%8F)%20eng.pdf)

- Braun, V. and Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. London, UK: Sage.
- Cenoz, J., Genesee, F., & Gorter, D. (2014). Critical analysis of CLIL: Taking stock and looking forward. *Applied Linguistics*, 35(3), 243-262. doi:10.1093/applin/amt011
- Coffin, C. (2017). Introduction to part II: Systemic functional linguistics: A theory for integrating content-language learning (CLIL). In A. Llinares & T. Morton (Eds.), *Applied linguistics perspectives on CLIL* (91-104). Amsterdam: John Benjamins.
- Available from
https://books.google.kz/books?id=e4MfDgAAQBAJ&pg=PR5&hl=ru&source=gbs_selected_pages&cad=2#v=onepage&q&f=false
- Cohen, L., Manion, L., and Morrison, K. (2003). *Research methods in education*. London / New York: Routledge.
- Cooper, R.L. (1989). *Language planning and social change*. UK: Cambridge University Press.
- Cummins, J. (2005, September). Teaching cross-language transfer in dual language education: Possibilities and pitfalls. *TESOL Symposium on dual language education: teaching and learning two languages in the EFL setting*. Symposium conducted at the meeting of the Teacher of English to speakers of other languages in Boğaziçi University: Istanbul.
- Grenoble, L. A. (2003). *Language Policy in the Soviet Union*. Dordrecht / Boston / London: Kluwer Academic Publishers.
- Creswell, J. (2014). *Educational Research: Planning, conducting and evaluating quantitative and qualitative research*. (4th ed.). Essex, UK: Pearson
- Coyle, D. (2005). CLIL planning tools for teachers. University of Nottingham. Available at
http://www.unifg.it/sites/default/files/allegatiparagrafo/20-01-2014/coyle_clil_planningtool_kit.pdf

- Dalton-Puffer, C. (2008). Outcomes and processes in Content and Language Integrated Learning (CLIL): Current research from Europe. In W. Delanoy & L. Volkmann (Eds.), *Future perspectives for English language teaching*. (1-19). Heidelberg: Carl Winter.
- Dave, B. (2007). *Kazakhstan: Ethnicity, language and power*. Oxon, UK: Routledge.
- Devos, N.J. (2016). *Peer interactions in new content and language integrated settings*. Cham: Springer.
- Doiz, A. Lasagabaster, D., & Sierra, J. M. (2014). CLIL and motivation: The effects of individual and contextual variables. *Language Learning Journal*, 42(2), 209-224. doi: 10.1080/09571736.2014.889508
- Djite, P. (1994). *From language policy to language planning*. Canberra: National Languages and Literacy Institute of Australia.
- Ellili-Cherif, M. (2014). Integrated language and content instruction in Qatar independent schools: Teachers' perspectives. *Teacher development*, 18(2), 211-228. doi: org/10.1080/13664530.2014.900819
- Ferguson, G. (2006). *Language planning and education*. UK: Edinburgh University Press.
- Fettes, M. (1997). Language planning and education. In R. Wodak & D. Corson (eds.), *Language policy and political issues in education* (pp. 13-22). Dordrecht: Kluwer Academic
- Fierman, W. (1998). Language and identity in Kazakhstan. *Communist and post-Communist studies*, 31(2), 171-186. doi: 10.1016/S0967-067X(98)00005-1
- Fiymar, O., Yakavets, N., & Bridges, D. (2014). Educational reform in Kazakhstan: The contemporary policy agenda. In D. Bridges (Ed.). *Educational Reform and Internationalisation: The Case of School Reform in Kazakhstan* (pp. 53-70). UK: Cambridge University Press.

- Garcia, O. & Menken, K. (2010). Stirring the onion: Educators and the dynamics of language education policies. In K. Menken & O. Garcia (Eds.), *Negotiating language education policies: Educators as policymakers* (pp.249-261). New York, NY: Routledge.
- Goodman, B. & Karabassova, L. (under review). Bottom up and top down: Comparing language-in-education policy in Ukraine and Kazakhstan. In I. Silova & M. Chankseiani (eds.), *Comparing post-socialist transformations: Education in eastern Europe and former Soviet Union*. Oxford: Oxford University Press.
- Kaplan, R.B. and Baldauf, R.B. (1997). *Language planning: From practice to theory*. Clevedon/Philadelphia: Multilingual Matters LTD.
- Hornberger, N.H. (2006). Frameworks and models in language policy and planning. In G. Ricento (Ed.), *An Introduction to Language Policy: Theory and Method* (pp.24-41). USA: Blachwell Publishing.
- Information-Analytic Center. (2017). *Teaching in three languages: International experience and recommendations for Kazakhstan*. Kazakhstan: Astana.
- Iyldyz, L. (2017). *Trilingual education policy in secondary schools in Kazakhstan: Teachers' beliefs and classroom practices*. Unpublished doctoral dissertation, Nazarbayev University, Kazakhstan, Astana.
- Johnson, D.C. (2013). *Language policy*. England: Palgrave Macmillan.
- Johnson, R. K. & Swain, M. (1994). From core to content: Bridging the L2 proficiency gap in late immersion. *Language and Education*, 8(4), 211-229. doi: 0950-0782/94/04/0211-19\$01.80/0
- Kambatyrova, A. & Iyldyz, L. (2015). Trilingual education policy in secondary schools in Kazakhstan: Teachers' beliefs and classroom practices. European Conference on Educational Research – ECER & Emerging Researcher's Conference. Ireland:

- University College Dublin. Retrieved from <http://www.eera-ecer.de/ecer-programmes/conference/20/contribution/34693/>
- Kellner-Heinkele, B., & Landau, J. M. (2012). *Language politics in contemporary Central Asia. National and ethnic identity and the Soviet legacy*. New York, NY: I. B. Tauris.
- Khamidulina, Z. (2016). Mind the gap: Towards an understanding of the implementation process of trilingual education policy at Nazarbayev Intellectual Schools, [Power Point slides]. Retrieved from http://webcache.googleusercontent.com/search?q=cache:_PLH0lAGJ_QJ:iac.kz/sites/default/files/ppt_khamidulina_e.pptx+&cd=1&hl=ru&ct=clnk&gl=kz
- Kuzhabekova, A. S. (2003). *Past, present and future of language policy in Kazakhstan* (Master's thesis). University of North Dakota, Grand Forks, ND. Retrieved from http://arts-sciences.und.edu/summer-institute-oflinguistics/theses/_files/docs/2003-kuzhabekova-aliya-s.pdf
- Larsen-Freeman, D. and Long, M. (1991). Explanations for differential success among second language learners. In D. Larsen-Freeman and M. Long, *An introduction to second language acquisition* (pp. 153-219). New York: Routledge.
- Larsen-Freeman, D. (2014). Saying what we mean: Making a case for 'language acquisition' to become 'language development'. *Language Teaching*. Retrieved from doi:10.1017/S0261444814000019
- Law of the Republic of Kazakhstan No. 394-IV. (2011, January 19). *On the status of Nazarbayev University, Nazarbayev Intellectual Schools and Nazarbayev Fund*. Astana.
- Liddicoat, A. J. (2004). Language policy and methodology. *International Journal of English Studies*, 4(1), 153-171.

- Liddicoat, A. J. (2013). *Language-in education policies: The discursive construction of intercultural relations*. Bristol: Multilingual Matters.
- Llinares, A. (2015). Integration in CLIL: A proposal to inform research and successful pedagogy. *Language, Culture and Curriculum*, 28(1), 58-73. doi: org/10.1080/07908318.2014.1000925
- Llinares, A. Morton, T. & Whittaker, (2012). *The roles of language in CLIL*. Cambridge, UK: Cambridge University Press.
- Lightbown, P. and Spada, N. (2013). *How languages are learned*. New York: Oxford.
- Matuszkiewicz, R. (2010). The language issue in Kazakhstan- institutionalizing new ethnic relations after independence. *Economic and Environmental Studies*, 2 (10) , 211-227. Retrieved from http://ees.uni.opole.pl/content/02_10/ees_10_2_fulltext_03.pdf
- Matthews, B. & Ross, L. (2010). *Research methods: A practical guide for the social sciences*. Harlow: Pearson.
- McLaughlin, C., McLellan, R., Fordham, M., Chandler-Grevatt, A. & Daubney, A. (2014). The role of teacher in educational reform in Kazakhstan: Teacher enquiry as a vehicle for change. In D. Bridges, *Educational reform and internationalization: The case of school reform in Kazakhstan* (239-260). Cambridge, England: Cambridge University Press.
- Mourshed, M., Chijioke, C. and Barber, M. (2010). *How the World's most improved school systems keep getting better*. London, UK: McKinsey.
- Mehisto, P., Kambatyrova, A. & Nurseitova, Kh. (2014). Three in One? Trilingualism in Educational Policy and Practice. In D. Bridges (Ed.). *Educational Reform and Internationalisation: The Case of School Reform in Kazakhstan* (pp. 151-176). UK: Cambridge University Press.

Meyer, O. (2010). Towards quality-CLIL: Successful planning and teaching strategies.

Pulse, 33, 11-29.

Mayo, G. & Basterrechea, M. (2017). CLIL and SLA: Insights from an interactionist

perspective. In A. Llinares & T. Morton (Eds.), *Applied linguistics perspectives on*

CLIL (33-50). Amsterdam: John Benjamins. Available from

https://books.google.kz/books?id=e4MfDgAAQBAJ&pg=PR5&hl=ru&source=gb_s_lected_pages&cad=2#v=onepage&q&f=false

Mehisto, P. (2015). Kazakhstan: From twenty trilingual schools to thousands? In P. Mehisto &

F. Genesee (Eds.), *Building bilingual education systems: Forces, mechanisms and*

counterweights (pp. 109-130). Cambridge, UK: Cambridge University Press.

Morton, T & Llinares, A. (2017). Content and Language Integrated Learning (CLIL): Type of

programme or pedagogical model? In A. Llinares & T. Morton (Eds.), *Applied*

linguistics perspectives on CLIL (1-18). Amsterdam: John Benjamins.

Nazarbayev, N. (2012). Kazakhstan 2050 Strategy: New Political Course of the Established

State. Annual State of the Nation Address. Astana, December 2012. Retrieved from

www.kazakhstan.org.sg/content/intro.php?act=menu&c_id=43

Nazarbayev Intellectual Schools (2017). *AEONazarbayev Intellectual Schools*. Available at

www.nis.edu.kz

Nikula, T. Dalton-Puffer, C. & Llinares, A. (2013). CLIL classroom discourse: Research from

Europe. *Journal of Immersion and Content-Based Language Education*, 1(1).

Retrieved from Taylor and Francis.

Nguyen, H. & Bui, T. (2015). Teachers' agency and the enactment of educational reform in

Vietnam. *Current Issues in Language Planning*, 17(1), 88-105.

doi.org/10.1080/14664208.2016.1125664

- Office of the President. (2013). Retrieved from www.akorda.kz/ru/page/page_v-kazakhstane-v-druzhbe-i-oglasii-prozhivaet-bolee-130-narodnostei-i-natsionaln_1348723760
- Ormston, R., Spencer, L., Barnard, M. and Snape, D. (2014). The foundations of qualitative research. In J. Ritchie, J. Lewis, C.M. Nicholis, R. Ormston (Eds.), *Qualitative research practice: a guide for social science students and researchers* (pp. 2-25). London, UK: Sage.
- Ortega, L. (2009). *Understanding Second Language Acquisition*. London: Hodder Education.
- Pavlenko, A. (2008). Multilingualism in Post-Soviet countries: language revival, language removal, and sociolinguistic theory. *International Journal of Bilingual Education and Bilingualism*, 4(3), 275-314. doi: 10.1080/13670050802271517
- Patton, M. Q. (2001). *Qualitative research and evaluation methods*. California: Sage.
- Pica, T. (2008). SLA in the instructional environment. *Working Papers in Educational Linguistics*, 23(1), 1-27.
- Pladevall-Ballester, E. (2014). Exploring primary school CLIL perceptions in Catalonia: Students', teachers' and parents' opinions and expectations. *International Journal of Bilingual Education and Bilingualism*, 1, 45-59. doi: 10.1080/13670050.2013.874972
- Priestley, M., Edwards, R., Priestley, A., & Miller, K. (2012). Teacher agency in curriculum making: Agents of change and spaces for manoeuvre. *Curriculum Inquiry*, 42(2), 191-214. doi: 10.2307/23253807
- Reagan T.G. (2010). *Language Policy and Planning for Sign Languages*. Washington, DC: Gallaudet University Press.
- Rees, K.M. & Williams, N. W. (2017). Explaining Kazakhstani identity: Supraethnic identity, ethnicity, language, and citizenship. *Nationalities Papers: The Journal of Nationalism and Ethnicity*. Advance online publication. doi: 10.1080/00905992.2017.1288204

- Ricento, T. (2006). *An Introduction to Language Policy: Theory and method*. USA: Blackwell Publishing.
- Ricento, T. K. & Hornberger N. H. (1996) Unpeeling the Onion: Language Planning and Policy and ELT Professional. *TESEOL Quarterly*, 30(3), 401-427.
- Ritchie, J. Lewis, J., Nicholis, C.M., and Ormston, R. (2014). *Qualitative research practice: a guide for social science students and researchers*. London, UK: Sage.
- Ruby, A., & McLaughlin, C. (2014). Transferability and the Nazarbayev intellectual schools: Exploring models of practice transfer. In D. Bridges (Ed.), *Educational reform and internationalization: The case of school reform in Kazakhstan (287-300)*. Cambridge, England: Cambridge University Press.
- Ruiz de Zarobe, Y., & Jiménez Catalán, M (Eds.). (2009). *Content and language integrated learning: Evidence from research in Europe*. Bristol: Multilingual Matters. Available from https://books.google.kz/books?id=CNHP7Ckph3MC&printsec=frontcover&hl=ru&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
- Schlyter, N. B. (2013). Multilingualism and Language Renewal in Ex-Soviet Central Asia. In T.K. Bhatia & W.C. Ritchie (Eds.), *The handbook of Bilingualism and Multilingualism* (pp. 871-898). Blackwell Publishing.
- Schmid, M. (2014). The debate on maturational constraints in bilingual development: Perspective from first-language attrition. *Language Acquisition*, 21, 386-410. doi: 10.1080/10489223.2014.892947
- Shegenova, Z. (2016). Advantages and disadvantages in teaching 'History of Kazakhstan' in the second language (Kazakh L2). [Power Point slides]. Retrieved from http://conferencesnis.edu.kz/wpcontent/uploads/2017/01/2ShegenovaZ_eng.pdf

- Skilton-Sylvester (2003). Legal discourse and decisions, teacher policymaking and the multilingual classroom: Constraining and supporting Khmer/English biliteracy in the United States. *International Journal of Bilingual Education and Bilingualism*, 6(3&4). doi:1367-0050/03/030168- 17\$20.00/0
- Smagulova, J. (2006). Kazakhstan, language, identity and conflict. *The European Journal of Social Science Research*, 19(3), 4, 303-320. doi: org/10.1080/1351161060109854
- Smagulova, J. (2008). Language policies of kazakhization and their influence on language attitudes and use. *International Journal of Bilingual Education and Bilingualism*, 11(3), 4, 440-475. doi: 10.1060/13670050802148798
- Smagulova, J. (2016). The re-acquisition of Kazakh in Kazakhstan: Achievements and challenges. In A. S. Elise & J. Smagulova (Eds.), *Language change in Central Asia* (89-107). Boston/ Berlin: De Gruyter.
- Shamshidinova, K., Ayubayeva, N. and Bridges, D. Implementing radical change: Nazarbayev Intellectual Schools as agents of change. In D. Bridges(Ed.), *Educational reform and internatinalisation. The case of school reform in Kazakhstan* (pp. 71-82).
- Sepešiová, M. (2015). CLIL lesson planning. In *CLIL in foreign language education: e-textbook for foreign language teachers* In S. Pokrivčáková, M. M. Babocká, K. Bereczky, M. B. Bodorík, D. Bozdoğan, L. Dombeva,...K. Zavalari (Eds.), *CLIL in foreign language education* (131-152). Nitra: Constantine the Philosopher University.
- Shohamy,E. (2006). *Language Policy: Hidden agendas and new approaches*. USA/Canada: Routledge.
- Suleimenova, E.D., Shaimerdenova, N.Z. & Akanova, D.H. (2008). Languages of Kazakhstani peoples: Sociolinguistic reference book. Kazakhstan, Astana: Arman-PV

- Spada, N. (1985). Effects of informal contact on classroom learners' L2 proficiency: A review of five studies. *TESL Canada Journal/Revue Tesl Du Canada*, 2(2), 51-62.
- Spolsky, B. (2004). *Language Policy*. UK: Cambridge University Press.
- State Programme for Development and Functioning of Languages in the Republic of Kazakhstan for 2011-2020 (2011). Retrieved from <http://strategy2050.kz/en/page/gosprog5/>
- State Programme for Educational Development for 2011-2020 (2010). Retrieved from <http://www.akorda.kz/upload/SPED.doc>
- Tamopolsky, O. & Goodman, B. (2014). The ecology of language in classroom at a university in eastern Ukraine. *Language and education*, 28(4), 386-396.
doi:org./10.1080/09500782.2014.89021
- Teacher Interview Protocol. (n.d.). *Intel guide to monitoring eLearning programs*. Retrieved from https://www.k12blueprint.com/sites/default/files/Teacher_Interview.pdf
- Throop, R. (2007). Teachers as language policy planners: Incorporating language policy planning into teacher education and classroom practice. *Working Papers in Educational Linguistics*, 22(2), 45-65.
- Tsui, A.B.M. (2010). Medium of instruction in Hong Kong: One country, two systems, whose language? In J.W. Tollefson & A.B.M. Tsui (Eds.), *Medium of Instruction Policies: Which agenda? Whose agenda?* (pp. 97- 116). New York/Oxon: Routledge.
- Willis, A. S. (2000). Culture-bound pedagogy's effect on immersion implementation- the Asina example. *Intercultural Communication Studies*, 1(1), 125-141
- Yakavets, N. (2014). Educational reform in Kazakhstan: The first decade of independence. In D. Bridges (Ed.). *Educational Reform and Internationalisation: The Case of School Reform in Kazakhstan* (pp. 1-27). UK: Cambridge University Press.

Yakavets, N. & Dzhadrina, M. (2014). Educational reform in Kazakhstan: Entering the world arena. In D. Bridges (Ed.). *Educational Reform and Internationalisation: The Case of School Reform in Kazakhstan* (pp. 28-52). UK: Cambridge University Press.

Appendix A: Informed Consent Form

Informed Consent Form for Geography Teachers at Nazarbayev Intellectual Schools

(NIS)

Challenges teaching in Kazakh as L2

DESCRIPTION: You are invited to participate in a research study on “Challenges teaching in Kazakh as L2”. The purpose of the study is to explore geography teachers’ perceptions towards teaching geography challenges in Kazakh as L2 at Russian-medium groups. You will be asked to participate in at least one-on-one interview. You may also be asked to participate in a classroom observation and a followup interview. All observations and interviews will be audiotaped only with your primary consent. Upon your approval, names or other identifying information will be kept anonymous by using pseudonyms. All gathered data will be stored in the special folder on the researcher’s laptop, protected with the unique password. No one except the researcher (me) and (My) the Thesis Supervisor will have an access to the information.

TIME INVOLVEMENT: The interview will last approximately at first stage 30 minutes. If asked to participate, the first classroom observation will last approximately 20 minutes. The second classroom observation will last approximately 40 minutes. The second interview will last nearly 20 minutes.

RISKS AND BENEFITS: The risks associated with this study are minimal. Your identity will be concealed and the given information will not be discussed with other parties (NIS administration, teachers or students). The benefits which may reasonably be expected from this study are teachers’ views formally in academic level can lead to further policy recommendation or high decision-making stages. Basing on your experience, stakeholders of macro and micro levels may amend trilingual education reform strategies, improving the quality of learning and teaching.

PARTICIPANT’S RIGHTS: If you have read this form and have decided to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. The alternative is not to participate. You have the right to refuse to answer particular questions. The results of this research study may be presented at scientific or professional meetings or published in scientific journals.

CONTACT INFORMATION:

Questions: If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, contact the Master’s Thesis Supervisor for this student work, Assistant Professor, Bridget Goodman, bridget.goodman@nu.edu.kz

Independent Contact: If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the NUGSE Research Committee to speak to someone independent of the research team at +7 7172 709359. You can also write an email to the NUGSE Research Committee at gse_researchcommittee@nu.edu.kz. Please sign this consent form if you agree to participate in this study.

- I have carefully read the information provided;
- I have been given full information regarding the purpose and procedures of the study;
- I understand how the data collected will be used, and that any confidential information will be seen only by the researchers and will not be revealed to anyone else;
- I understand that I am free to withdraw from the study at any time without giving a reason;
- With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

Signature: _____

Date: _____

Appendix B Consent Forms

PARENTAL INFORMED CONSENT FORM FOR RESEARCH INVOLVING CHILDREN

Challenges teaching in Kazakh as L2

DESCRIPTION: Your child is invited to participate in a research study on “Challenges teaching in Kazakh as L2”. The purpose of the study is to explore geography teachers’ perceptions towards teaching geography challenges in Kazakh as L2 at Russian-medium groups. Your child will be asked to participate in two phased classroom observations, which will be audiotaped / video-taped only with your primary consent. Upon your approval, names or other identifying information will be kept anonymous by using pseudonyms. All gathered data will be stored in the special folder on the researcher’s laptop, protected with the unique password. No one except the researcher (me) and (My) the Thesis Supervisor will have an access to the information.

RISKS AND BENEFITS: This study has no known risks. The benefits which may reasonably be expected to result from this study are not directed towards your child; however, stakeholders of macro and micro levels may amend trilingual education reform strategies, improving the quality of learning and teaching. Your decision whether or not to allow your child to participate in this study will not affect your child’s grades or participation in school.

TIME INVOLVEMENT: First classroom observation will last approximately 20 minutes. The second classroom observation will last approximately 40 minutes.

SUBJECT'S RIGHTS: If you have read this form and have decided to allow your child/student to participate in this study, please understand your child’s participation is voluntary and your child has the right to withdraw his/her consent or discontinue participation at any time without penalty or loss of benefits to which he/she is otherwise entitled. Your child’s individual privacy will be maintained in all published and written data resulting from the study.

CONTACT INFORMATION:

Questions: If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, you should ask the Master’s thesis Supervisor, (Assistant Professor, Bridget Goodman, bridget.goodman@nu.edu.kz)

Independent Contact: If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a

participant, please contact the NUGSE Research Committee to speak to someone independent of the research team at +7 7172 709359. You can also write an email to the NUGSE Research Committee at gse_researchcommittee@nu.edu.kz

I (we) have read the information above and hereby consent to have my (our) child participate in this study by signing below.

Signature(s) of Parent(s) or Guardian

Date

ФОРМА ИНФОРМАЦИОННОГО СОГЛАСИЯ РОДИТЕЛЕЙ ДЛЯ ПРИВЛЕЧЕНИЯ ДЕТЕЙ К ИССЛЕДОВАНИЮ

Трудности преподавания на Казахском языке как второй язык

ОПИСАНИЕ: Ваш ребенок приглашен принять участие в исследовании по изучению трудностей преподавания географии на казахском языке как второй язык в русскоязычном классе. Вашему ребенку будет предложено принять участие в двух наблюдениях класса исследователем, которые будут записаны или сфотографированы для исследования непосредственно с Вашего разрешения. Анонимность личностей и имен во время анализа будут обеспечены, используя псевдонимы. Все данные наблюдения будут храниться в защищённой кодом папке в персональном компьютере у исследователя. Доступ к собранным информациям будут у исследователя (меня) и у научного руководителя (моего).

ВРЕМЯ УЧАСТИЯ: Первое наблюдение класса с участием Вашего ребенка будет длиться около 20 минут.
Второе наблюдение класса с участием Вашего ребенка будет длиться 40 минут.

РИСКИ И ПРЕИМУЩЕСТВА:

Определенные риски, связанные с исследованием не наблюдаются. От результата исследования Ваш ребенок не будет иметь никаких преимуществ. Однако, результаты этого исследования могут улучшить стратегию внедрения реформы трёхязычного образования на всех уровнях, который приведёт качественному обучению и преподаванию. Ваше решение о согласии либо отказе в участии Вашего ребенка никаким образом не повлияют на его учебу и оценки в школе.

ПРАВА УЧАСТНИКОВ: Если Вы прочитали данную форму и дали разрешение Вашему ребенку принять участие в данном исследовании, Вы должны понимать, что участие Вашего ребенка является добровольным: и у Вашего ребенка есть право отозвать свое согласие или прекратить участие в любое время без штрафных санкций

и без потери социального пакета, который Вам предоставляли. В качестве альтернативы можно не участвовать в исследовании. Результаты данного исследования, могут быть представлены или опубликованы в научных или профессиональных целях, сохраняя анонимность участников исследования.

КОНТАКТНАЯ ИНФОРМАЦИЯ:

Вопросы: Если у Вас есть вопросы, замечания или жалобы по поводу данного исследования, процедуры его проведения, рисков и преимуществ, Вы можете связаться с научным руководителем исследователя, используя следующие данные: *Ассистент профессор, Бриджит Гудман*, bridget.goodman@nu.edu.kz

Независимые контакты: Если Вы не удовлетворены проведением данного исследования, если у Вас возникли какие-либо проблемы, жалобы или вопросы, Вы можете связаться с Комитетом Исследований Высшей Школы Образования Назарбаев Университета по телефону +7 7172 70 93 59 или отправить письмо на электронный адрес gse_researchcommittee@nu.edu.kz
Пожалуйста, подпишите данную форму, если Вы согласны участвовать в исследовании.

- Я внимательно изучил представленную информацию;
- Мне предоставили полную информацию о целях и процедуре исследования;
- Я понимаю, как будут использованы собранные данные, и что доступ к любой конфиденциальной информации будет иметь только исследователь;
- Я понимаю, что вправе в любой момент отказаться от участия в данном исследовании без объяснения причин;
- С полным осознанием всего вышеизложенного я согласен принять участие в исследовании по собственной воле.

Подпись: _____

Дата: _____

Appendix C: Interview Questions

1. How long have you been teaching geography?
2. How long have you been teaching geography at NIS ?
3. When did you start teaching geography in Kazakh as L2 at Russian medium groups at NIS?
4. What support were you offered from school /other organizations /from your NIS colleagues when you were offered teaching geography in Kazakh as L2 to RMGs?
5. What kind of challenges do you meet in teach geography in Kazakh as L2?
6. What issues do you pay more attention during lesson planning stage?
7. How do select materials?
8. How much time do you need to prepare materials for L2 lessons?
9. How do you design your teaching materials for teaching geography in Kazakh as L2?
10. How do you gauge the relevance of materials to your L2 learners' language level?
11. Can you describe specific activities or approaches which you began implementing in class after attending the above mentioned professional development seminars, sessions?
12. How do you address L2 content and language teaching challenge in practice?
13. How do your students' cope with L2 assignments in practice?
14. What additional support do your students get to overcome L2 learning challenges?
15. Can you tell me about the role of students' language environment in learning subjects in Kazakh as L2

Follow up interview questions after two classroom observations

1. Please, describe those stages of the first and the second lesson? (Teacher Interview Protocol, n.d.) ?

2. What was the most challenging point for you as a teacher? (Probing: say some words about language in teaching the material or in explaining the activity?)
3. What challenges did you perceive from learners' side and when?

Appendix D: Classroom observation field notes' protocols

First observation:

Description of students and facilities	Reflective notes
Students' behavior	
Teacher- learner/ learner- learner relationships	
Learning environment	
Classroom facilities	

Second Observation:

Procedure & Time	Interaction al Setting	Reflective Notes	Program Setting	Reflective notes
description of interaction (formal & informal)			Activities, tasks; Organized resources;	

Appendix E: Data Analyses Approach

IQ	Transcript	Codes
How long have you been teaching geography? How long have you been teaching geography at NIS? When did you start teaching geography in Kazakh as L2 at Russian medium groups at NIS?	My teaching experience is 20 years. I taught geography only in Kazakh-mediums before NIS. In 2012-2013 I started working at NIS and at the beginning of the academic year I taught geography only in Kazakh-mediums. The following year for the first time geography was taught in Russian-medium groups in Kazakh as L2. And for the first time I begin teaching geography in Russian-medium groups in Kazakh as L2.	Code 1. Educational experience. (years of teaching geography in Kazakh as L2)
What kind of challenges do you meet in teach geography in Kazakh as L2?	The most visible challenge is learners' non-homogenously developed L2and from this causes other challenges, for example low learners' academic L2 level, pronunciation issues. "...at presentation stage.... some of them could not pronounce properly some terms... they do not pronounce and use those terms in their everyday interactions in L2	Code 2. L2 challenges in teaching
How do you address L2 content and language teaching challenges in practice?	...one of the valuable sources are maps and atlas,...there are standardized signs in maps...the learners explore and work with maps...as learners do not use key terms in their everyday lives... I translate them into L1 and ...the learners write definitions of words in theirL1.	Code 3. Addressing L2 teaching challenges during preparation for class and
What support were you offered from school /other organizations /from your NIS colleagues when you were offered teaching geography in	I participated in CLIL seminar which was organized by CEP There were shown various practical activities; I still implement them in my lessons to	Code 4. Teaching innovations in L2 classroom

Kazakh as L2 to RMGs?	address L2 teaching challenges...close or open questions, information gap activity in CLIL
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Appendix F: Syllabi Layout

Note: this a general outline of NIS geography syllabi for the 8th and the 9th grades. According to the research ethics I could not supply with real geography content, however, in brackets I put my own comments related to the syllabi content.

Medium term plan

1. Unit title			
Recommended prior knowledge			
Context			
Language objectives of “Geography” within This Unit			
A sample language objectives with related academic language for learners is provided below			
Subject Learning Objectives	Language Learning Objectives	Subject-Specific Vocabulary and Terminology	Useful Set(s) of Phrases for Dialogue / Writing
(there are approximately eight or ten general subject objectives for a unit)		(general unit specific terms)	
To create other language objectives, and for additional guidance on language teaching objectives that apply to the teaching and learning of academic language, see “Introduction to language objectives” above.			
Outline			
(a short review of the given unit with three or four sentences)			

Subject program reference	Learning objectives	Suggested teaching activities	Teaching notes	Learning resources
<i>(general title of a unit and subtopic of the unit</i>				
which were placed under each term in “Subject program/ Long term plan” section before the “Medium term plan” section)				
